ARCHAEOLOGIA

OR

MISCELLANEOUS TRACTS

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SOCIETY OF ANTIQUARIES OF LONDON

VOLUME LXV

PRINTED AT OXFORD

BY HORACE HART FOR

THE SOCIETY OF ANTIQUARIES

AND SOLD AT THE SOCIETY'S APARTMENTS IN BURLINGTON HOUSE, LONDON

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I. *The 'Tomb of the Double Axes' and Associated Group, and the Pillar Rooms and Ritual Vessels of the 'Little Palace' at Knossos.* *By* Sir ARTHUR EVANS, *D.Litt., F.R.S., F.S.A.*

Read 4th December, 1913

PART I

THE TOMB OF THE DOUBLE AXES AND ASSOCIATED GROUP

§ 1. *Discovery of a New Cemetery at Isopata.*

THE discovery of the 'Royal Tomb' on the upland plateau of Isopata, described by me in *Archaeologia* in 1906,[1] has had an important sequel. About a quarter of a mile farther north of the same headland, on the edge of the plateau that here overlooks the site of the ancient harbour-town of Knossos, a series of Minoan tombs has since been unearthed, some of which throw a wholly new light on the sepulchral cult in vogue during the earlier part of the Late Minoan Age. One tomb indeed, that of 'the Double Axes', to be described below,[2] combines points of structural and religious interest to a degree altogether unexampled among the early sepultures of the Aegean lands.

Hardly less interesting is the evidence supplied in some of these tombs—notably no. 5—of the survival in a new form of the earlier polychrome tradition of the Middle Minoan Age but applied to a special class of ritual vases, and here devoted to the use of the departed.

The first tomb discovered consisted of a built chamber originally with a keeled roof, and supplying a smaller version of the Royal Tomb. As in the former case, the objects that actually lay within it were of L. M. II date, but a deposit found at the point where its entrance passage would have reached the surface presented forms which go back to the close of the Middle Minoan Age.[3] The 'Tomb of the Polychrome Vases' (no. 5) afforded for the first time an undoubted example of an interment going back to the First Late Minoan Period. The 'Tomb of the Double Axes' belongs as clearly to the succeeding, Second Late Minoan Period, and contained magnificent vases in the style characteristic

[1] *The Tombs of Knossos* (*Archaeologia*, lix, 1906).

[2] See p. 33 seqq.

[3] See below, p. 3.

of the latest phase of the Knossian Palace. 'The Mace-bearer's Tomb' (no. 3), on the other hand, and Tombs 1 A, 4, and 6, illustrate the period of incipient decline (L. M. III *a*) that succeeded the fall of the Great Palace. These latter interments therefore are contemporary with the bulk of those from the cemetery of Zafer Papoura.

The first clue to this new group of tombs was afforded by a chance discovery made in 1900 by a peasant while digging a trench in his vineyard, at the north end of the Isopata plateau. Here, beneath a bank that bordered his property on the west side, he brought to light a small deposit of Minoan relics. It was natural to conclude that these objects, consisting of stone vases and the remains of bronze weapons, had formed part of the loot of some neighbouring tomb, and had possibly been left behind by its rifler at a time when he carried away other objects of greater intrinsic value. A cutting was therefore made along the foot of the bank, at first ineffectually, to the north and then to the south, which resulted, after a week's work, in the discovery of Tomb no. 1 of the present series.

Further investigations were undertaken in 1910, in which (as in the case of the earlier found tombs) I had the invaluable assistance of Gregorios Antoniou, the most expert tomb-hunter of the Levant, and the result of these researches was to bring to light five more chamber-tombs, in this case cut out of the soft 'kouskouras' rock. The location of these was partly due to trenching along the edge of the plateau, partly to the sinking of shafts in places where, owing to the character of the surface vegetation, it seemed probable, in Gregori's opinion, that there might be an early cutting below. As in the case of the cemetery of Zafer Papoura, a serviceable guide was supplied by clumps of fennel, a plant with exceptionally long roots, and which therefore grows by preference in places where there has been previous excavation.

In the excavation of the tombs I had the assistance of Dr. Duncan Mackenzie, to whose day-book and careful observations I am greatly indebted. The extraordinary points of interest and delicate details in the planning of the two great chamber-tombs—that of 'the Double Axes' (no. 2) and the 'Tomb of the Polychrome Vases' (no. 5)—necessitate a more elaborate study than is generally entailed by the usually simple monuments of this class. This work has been carried out with minute care by Mr. Christian Doll, plans and sections by whom, completed early in the present year, are here reproduced.

§ 2. *The Isolated Deposit, and Tombs* 1, 3, 4, 5, *and* 6.

The most important and best-preserved relic contained in the isolated deposit which gave the first clue to the existence of this group of tombs was the inlaid

stone vessel (fig. 1).[1] Its material is a kind of brown limestone, the upper part being decorated with white shell inlays inserted in drilled sockets.[2] This vessel, with its holed spout, flat rim, and two handles, rising on either side, resembles a well-known Middle Minoan ceramic class of 'hole-mouthed vases' associated with the finest style of polychromy. It has, moreover, a special chronological value, since remains of vessels of the same material with an identical system of shell inlaying occurred in Palace deposits at Knossos belonging to the close of the Middle Minoan Age (M. M. III). They came to light in the deposit accumulated in the 'North Bath', and again in that underlying a Late Minoan wall in which the inscribed alabastron lid with the cartouche of the Hyksos King Khyan was discovered.

Fig. 1. Brown limestone vessel with shell inlays. (½)

With this inlaid vessel was found part of a large alabaster vessel (fig. 2), and remains of another smaller example which it was possible to restore in its entirety (fig. 3). It is of somewhat coarse alabaster, and in form resembles a type already in vogue during the XIIth Dynasty, but which continued to be in use

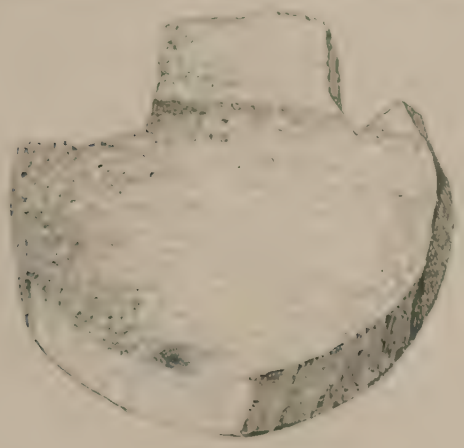


Fig. 2. (½)

Fig. 3. (¼)

Fig. 4. (½)

in the early part of the XVIIIth, and of which specimens occurred in the Royal Tomb.[3] This type gave origin to a series of clay forms of the First and Second Late Minoan Age, the painted waved decoration on some of which is clearly

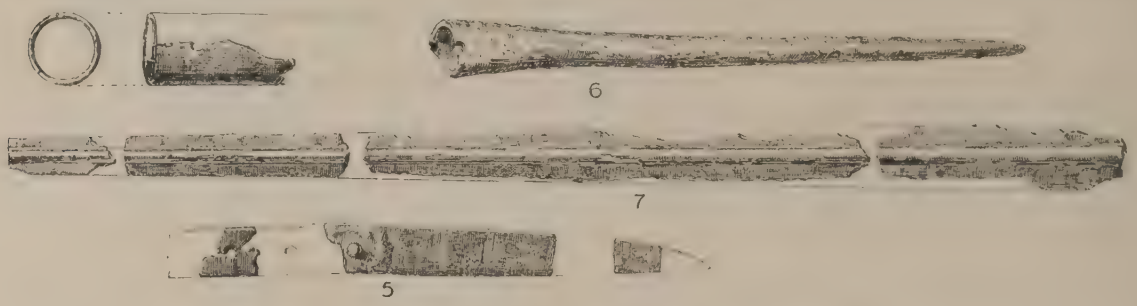
[1] The height of the vessel is 10·8 cm.; width at handles, 14·3 cm.

[2] The drills show a central hole, as if a borer of the centre-bit kind had been used.

[3] *Prehistoric Tombs of Knossos* (*Archaeologia*, lix, 1906), p. 147, 3, 4, 5 and 6, and fig. 152, 3, etc.

an imitation of the veins of the original alabastron. There was also the lower part of what seems to have been a small globular vessel, of the same material (fig. 4).

With these stone vessels were also found the remains of bronze weapons in a very fragmentary condition. Among these were parts of a knife (fig. 5), the pointed butt-end ('sauroter') of a spear (fig. 6) of very elongated proportions, having a length of 33 cm., while the diameter of the mouth of the socket, measured externally, was 2·7 cm. Of definite chronological importance are the remains of



Figs. 5–7. Bronze weapons and implements: isolated deposit.

two swords or rather rapiers of the early tanged type characteristic of the Shaft Graves of Mycenae (fig. 7). Of these only parts were preserved, presenting the abnormally high midrib of this class. The smaller sword, of which part of the tang was preserved (fig. 8, *c*), was only 1·8 cm. in width at about 6 cm. from

Fig. 8. Tang and sections of swords: isolated deposit. (½)

the tang, its cross section being 0·92 cm., so that it was more than half as high as it was broad (fig. 8, *b*). The remains of the larger sword (fig. 7) showed a width of about 2·8 cm. at the upper end, the section through the midrib being 1·2 cm. (fig. 8, *a*). A sword of the same width from a Shaft Grave at Mycenae has a stem approaching this in thickness.[1]

We have thus concordant indications, supplied alike by stone vessels with the shell-inlays and the sword-types, that some of the objects the discovery of

[1] Sophus Müller, *Ursprung und Entwickelung der europäischen Bronzekultur* (*Archiv f. Anthr.*, 1884, p. 325, fig. 11). Unfortunately, a complete section is not given. A section of a sword-blade from Orchomenos, 3·1 cm. wide, published by Naue, *Die vorrömischen Schwerter*, pl. iii, fig. 11, shows a midrib 1 cm. thick.

which led to the finding of the present series of tombs go back to the very earliest Late Minoan phase, and even to within the borders of the latest Middle Minoan Age.

Tomb no. 1. Built Chamber with Corbelled Vaulting, and Tomb 1 A.

The deep exploratory trench, excavated southwards along the foot of the bank, from the point where the isolated deposit came to light, finally led us, as already mentioned, to a built tomb, the *dromos* of which pointed north along the line by which we had advanced. The back wall of this was first struck at a distance of 55·50 metres south of the deposit. It is curious to note, according

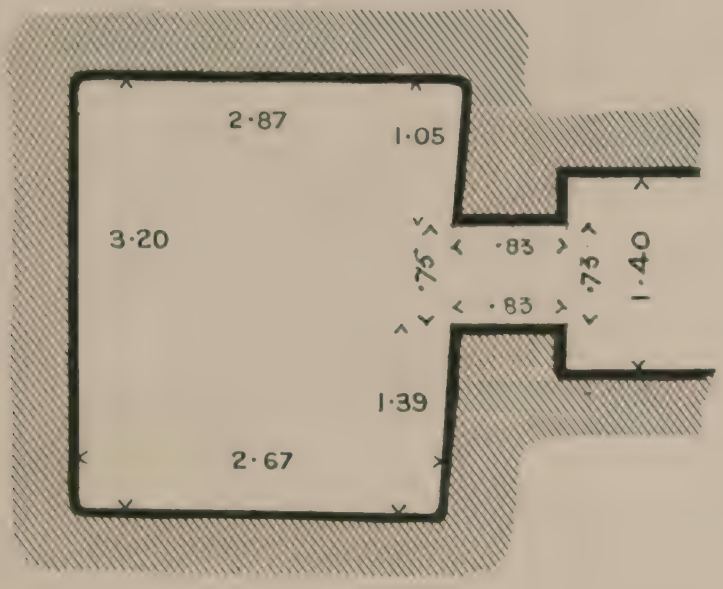


Fig. 9. Plan of later tomb (1 A).

to the calculation made by Mr. Doll from the slope of the *dromos*, that the site of the deposit exactly corresponds with the point at which the entrance passage would have reached the level ground. This coincidence can hardly be accidental.

The tomb itself proved to be a built chamber-tomb of the same type as the Royal Tomb of Isopata, on a considerably smaller scale. It was oriented north and south, with the entrance to the north, the *dromos* being set at a slightly different angle to the axis of the chamber. An interesting feature of its approach was that, at a time when it was already closed, a plain rock-cut chamber-tomb (1 A) was made, of somewhat smaller dimensions, with its entrance passage at right angles to that of the other, and its door opening in the west face of the earlier *dromos*, and 11·80 metres north of the entrance of the built tomb. (See plan, fig. 9 and pl. I). Its floor was about a metre below that of the *dromos* of the large tomb at this point.

Tomb 1 A.

This secondary tomb had been rifled and the relics that it still contained were a good deal scattered about. Among these were bronze arrowheads of the minute type found in the 'Hunter's Tomb',[1] three larger arrow or javelin heads of the same material (fig. 10, *a*, *b*, *c*), a gold filigree pendant (fig. 10, *d*) and beads, an almond-shaped bead of cornelian, of the class known in Crete as 'galopetras' or milk-stones. It was engraved with a rude figure of an eagle (fig. 10, *g*). There

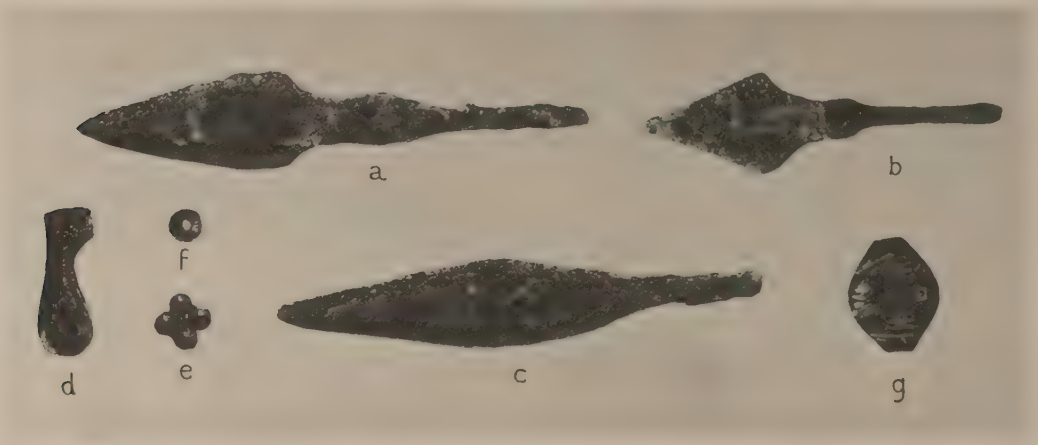


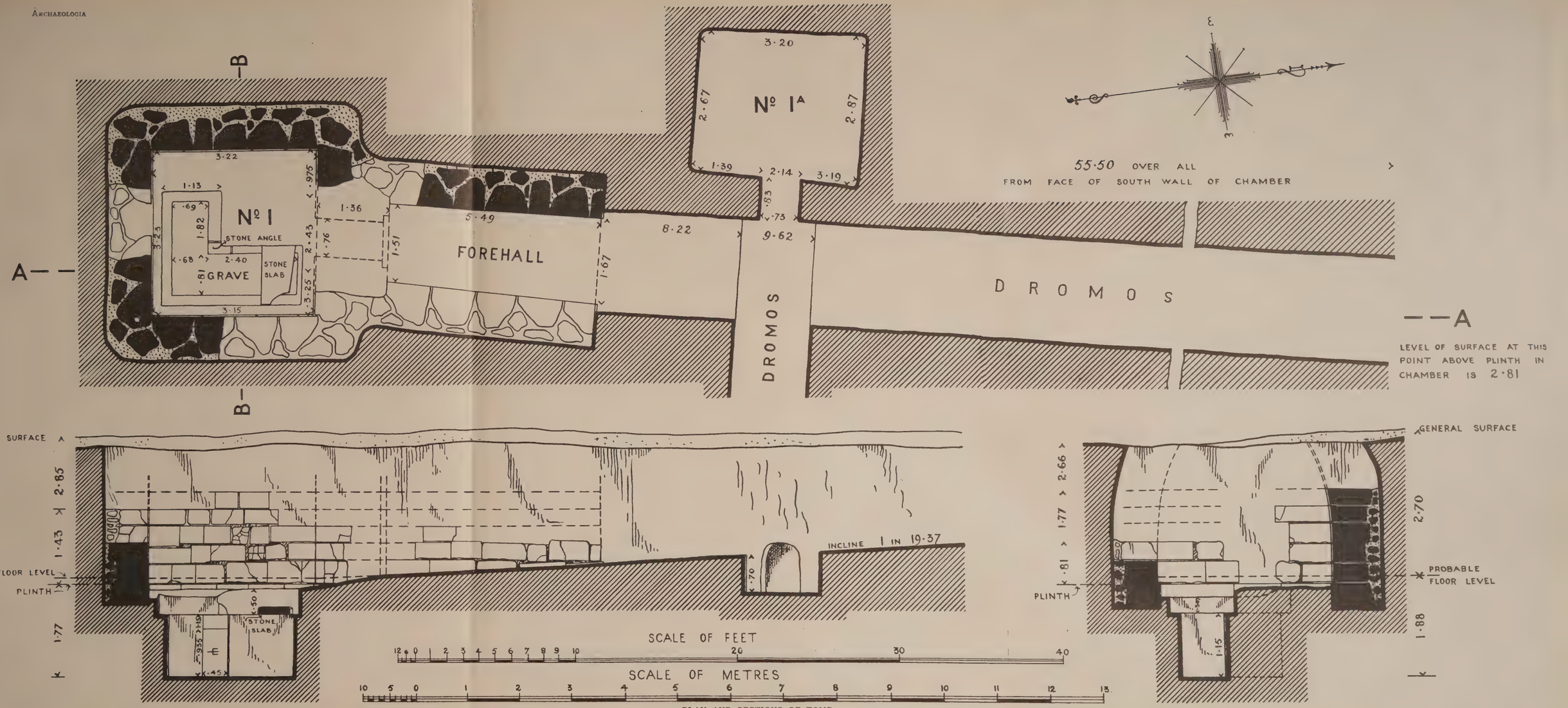
Fig. 10. Objects rom Tomb 1 A. (Slightly reduced.)

was also a larger and smaller clay jug and a small vessel of the 'hole spouted' class (fig. 11, *a*, *b*, *c*). The surface of these was much decayed, but the latter bore traces of a design, red on a buff ground, showing festoons and pendants—a characteristic decoration of the early part of the Third Late Minoan Age.[2] This tomb belonged therefore to the same period as the later tombs of Zafer Papoura. It seems to have been constructed at a time when even the existence of the *dromos* of the larger tomb (1) had been forgotten.

Tomb 1.

The character of the principal tomb (no. 1), to which the *dromos* led, is best shown by the view given in fig. 12, and the plans and sections (pl. I, *a*, *b*). It will be seen that it is of square outline somewhat over three metres in either direction, and with its entrance on the north side. The west wall, which is the best preserved, shows six courses, of which the first five have an upright face. The sixth

[1] *Prehistoric Tombs of Knossos*, p. 32, fig. 28 (*Archaeologia*, lix).
[2] Cf. *Prehistoric Tombs of Knossos*, p. 22, fig. 14.



PLAN AND SECTIONS OF TOMB 1

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Fig. 11. Clay vessels from Tomb 1A.

Fig. 12. View of built tomb, No. 1, from entrance.

is splayed forward, showing that the chamber was of the same type as that of the Royal Tomb, with a keel-shaped vault and two upright ends. The corbelling must have been completed, as in the other case, by means of large coping slabs. It appears, indeed, that at Malami, a coast village about two hours west of Canea, some plundered tombs of the same class exist, the coping slabs of which are still partly in place.[1]

The comparison with the Royal Tomb was borne out by other features. Small chips were fitted in between the courses in the same way, and the intervals between the courses are filled in with similar white stucco. At the back of the tomb was a gap in the masonry as if a recess had been there, as in the case of the Royal Tomb. The face of the blocks was partly rough, partly of finely hewn limestone. Outside the doorway was a fore-hall, three courses of the masonry of which were preserved on the west side.

Fig. 13. Chalcedony bead seal, showing gold caps. (½)

In the floor of the chamber a Γ-shaped cist, or rather, a double cist without any partition, had been sunk in the soft rock or 'kouskouras', following its eastern and southern sides. The roof-slabs of the eastern section of this were still in place, but beyond this point they had been removed. At the internal angle between the two sections of the cist had been set an upright block,[2] surmounted by a smaller one, and on this had been cut the 'trident' sign, ⊣∈, familiar on the Palace walls and notably on the north bastion at Knossos. It will be recalled that this and other signs occurred on blocks of the Royal Tomb at Isopata.[3]

Fig. 14. Chalcedony bead seal. (½)

The blocking of the doorway had been removed and the tomb robbed in antiquity, but our search was rewarded by the discovery of some small but interesting relics. On the floor of the part of the cist still covered with its roof-slabs was found, together with some gold beads[4], a perforated chalcedony intaglio. Its two ends were encased in gold, and it seems to have originally formed part of a ring (figs. 13, 14). It presents a bold design of two men of very solid build,

[1] I am indebted for this information to Dr. Joseph Chatzidakis, Ephor of Cretan Antiquities.

[2] This block was 0·90 m. high, 22 cm. broad, and 0·45 m. deep.

[3] *Prehistoric Tombs of Knossos*, p. 167 (*Archaeologia*, lix).

[4] Five were in the form of rosettes, as *Prehistoric Tombs, etc.*, p. 130, fig. 119, 66 a, but smaller and of somewhat finer workmanship. Five others were of the common Minoan and Mycenaean type resembling the eyes of 'hooks and eyes', but with the loop closed.

and a huge mastiff with a knobbed collar, which the foremost of the men appears to be holding. This supposition, moreover, is borne out by a parallel type, rather sketchily executed on a green jasper lentoid from eastern Crete, in which the somewhat abraded figure of a single man is seen holding the collar of a gigantic hound (fig. 15). There are reasons for believing that the great Minoan Goddess, like the nearly related divinity of Eryx, had sacred dogs in her service.[1] Like those of the Sikel God Hadranus, which exceeded the Molossian hounds in size,[2] they may have been not only guardians of her sanctuaries, but executors of her behests.

Probably derived from the cist, but lying on the floor of the chamber near its western border, were some gold spiral beads and a gold ring of great interest (fig. 16). Its principal theme is what seems to be a kind of orgiastic dance performed by female votaries in a field of lilies, small tufts of which are seen

Fig. 15. Green jasper lentoid from Eastern Crete. (⅔)

Fig. 16. (⅔)

between the figures. The votaries are dressed in the flounced Minoan robes with open bosom, and have long flowing locks. They are designed in a very spirited manner, but owing to a not unusual convention in this class of work their heads are abnormally small and summarily delineated. Three of the votaries raise both arms in the attitude of adoration, but the central figure holds one arm to her side and raises the other to her bowed head. The upper part of the besil is traversed by an undulating line apparently intended to represent a serpent—a well-known attribute of the Minoan Goddess—the head of which is seen above the figures on the left (as shown in the impression). Above this, again, is an uncertain object of elongated form with a beaded surface,[3] while to the right is a small female figure whose locks fly out on either side as if she were rapidly descending.

[1] The dog as a sacred animal is continually represented on the coins of Eryx, and must surely there be connected with the Goddess. At the sister city of Segesta, the river Krimissos was said to have approached the eponymous nymph in the form of a dog.

[2] Aelian, *H. A.*, xi. 20 *Κύνες εἰσὶν ἱεροί, καὶ οἵδε θεραπευτῆρες αὐτοῦ καὶ λατρεύοντές οἱ ὑπεραίροντες τὸ κάλλος τοὺς Μολοττοὺς κύνας, καὶ σὺν τούτῳ καὶ τὸ μέγεθος, χιλίων οὐ μείους τὸν ἀριθμόν.*

[3] A somewhat similar object is seen in the upper part of the field of a signet-ring exhibiting

The analogy of another religious scene on a signet-ring from Knossos is here of great value. In that case a female votary appears in the attitude of adoration before an obelisk at the gate of a sanctuary, above which is seen a small descending figure of an armed God who seems to have been brought down to the sacred pillar by due ritual incantation. His rapid descent is in this case indicated by his long locks of hair flying out on either side,[1] and there can be little doubt that the small figure in the present design, with similar flying locks, must also be regarded as a descending divinity, here of the female sex. In the ecstatic action of the dancers we may thus see a visible manifestation of divine possession.

A very remarkable feature of this religious scene remains to be described. In the field immediately to the left of this central figure appears a human eye, which may be taken to symbolize the all-seeing presence of the divinity. It curiously recalls the 'eye of God' so frequent above old Biblical illustrations.

This design derives additional interest from the near parallel that it presents to the subject of one of the 'miniature frescoes' found in the Palace of Knossos. In what appears to be a courtyard bounded by paved causeways are seen two lines of female figures performing some kind of ceremonial dance with much gesticulatory action—one hand being generally raised. The background is occupied by dense crowds of male and female spectators in a state of evident excitement at the spectacle before them, and there is seen a group of trees, presumably part of a sacred grove. The attention of both dancers and spectators is directed towards some central point of attraction to the left of the scene, no remains of which have been preserved, but which must certainly have been of a religious nature.

The scene on the ring may be regarded, in conformity with the usual 'short hand' of glyptic art, as the abbreviated representation of one containing a much larger number of dancers—such as is suggested by what has been preserved to us of the fresco. On a cornelian gem from the Vapheio tomb[2] appears a single figure of an ecstatic dancer, with one arm raised above her head and the other apparently holding a flute. She seems to be wearing a skirt composed of the skin of a sacrificial animal.

a religious scene from the Vapheio Tomb (see enlarged drawing, *Mycenaean Tree and Pillar Worship*, p. 78, fig. 52). Religious emblems are frequent in the field of signet-rings with similar subjects—e. g. on the last-mentioned example, a combination of the double axe and *auch*, on the great signet from Mycenae, the double axe and solar symbol.

[1] In *Mycenaean Tree and Pillar Worship*, p. 74 (*J. H. S.* 1901, p. 172), I had erroneously taken this feature for rays emanating from the God's shoulders, like those seen in representations of the Babylonian Samas. But the parallel supplied by a descending divinity on a 'larnax' from Milatos as interpreted by the light of the figures with flying locks on the Knossian frescoes gave the true explanation. See *Tombs of Knossos* (*Archaeologia*, lix), p. 100.

[2] Ἐφημ ἀρχ., 1889, pl. x, 12; Furtwängler, *Antike Gemmen*, pl ii, 45.

Curiously enough, the best commentary on the orgiastic dances seen in these designs is supplied by the accounts of a religious performance carried out by orders of a prince of the Philistine Tsakaras, and belonging therefore to a colonial stock largely of Cretan extraction. The Golenischeff Papyrus, containing the account of the travels of the Egyptian official Wen Amon in the eleventh century B.C., is the source of this information.[1] Badira, Prince of Dor, anxious to secure a vessel wherein to speed his Egyptian guest, makes offering to his God, who takes

Fig. 17. Fragments of painted pottery from Tomb 1.

possession of his principal page and sets him off into an ecstatic frenzy, indicated by the determinative of dancing. In this state he voiced the divine commands, and that evening a ship arrived.

In this case it is a youth who is thus possessed by the divinity, while the orgiastic dancers in the Minoan scenes are of the female sex.

The inner diameter of the gold ring from Tomb 1 was 1·4 cm. × 1·2, dimensions too small for any adult wearer, but which agree, however, very closely with a gold ring found in Tomb 6 of this group, the inner diameter of the hoop of which was 1·5 cm. The hoop of an otherwise massive gold signet-ring found at Knossos in

[1] Golenischeff, *Recueil des Travaux*, xxi. 74 seqq., and cf. W. Max Müller, *Mitth. d. vorderasiatischen Gesellschaft*, 1900, pp. 14 seqq.

1893[1] has the same dimensions; one from the Vaphcio Tomb[2] is 1·3 cm. × 1·1, and another from a tomb of the Lower Town at Mycenae[3] is 1·2 cm. × 1·1. It can hardly be inferred that all these rings were intended for young children. It is unreasonable to suppose that they were made for suspension, and the almost inevitable conclusion seems to me to be, that this class of signet-ring was specially made *in usum mortuorum*, and that the rings were fitted to the fingers at a time when the flesh was decayed. This conclusion, if warranted, will be seen to have a far-reaching bearing on Minoan funereal usage.

In the south-west corner of the chamber were found a few fragments of painted vases of the Palace style (fig. 17), including the top of a 'Bügelkanne' (fig. 17, *a*). There were also two plain clay chafing dishes[4] resembling one from

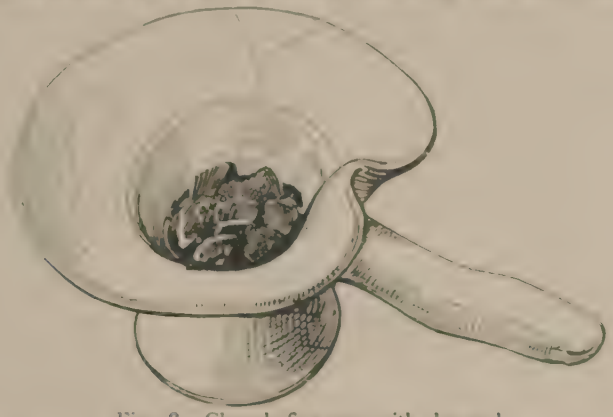


Fig. 18. Clay chafing-pan, with charcoal.

Tomb 32 at Zafer Papoura, here reproduced (fig. 18).[5] By these, and partly contained in them, were bits of charcoal and some lumps of resinous material of a translucent yellow hue with an outer layer of milky white. Professor Otto Olshausen, of Berlin, who kindly analysed a fragment of this, informs me that it is pure resin from which the oil of turpentine has mostly disappeared, thus forming a kind of natural *colophonium*.[6] Enough of the oil, however, remains to give it a resinous smell when burnt. The milky appearance of the exterior was due to the deterioration of the surface by natural causes in the course of over 3000 years.

The juxtaposition of the charcoal and resinous lumps points to the use of the latter—perhaps in company with other odorous materials—for the ritual fumigation of the sepulchral chamber.

(For Tomb 2, see below, p. 33 seqq., 'The Tomb of the Double Axes'.)

[1] *Mycenaean Tree and Pillar Worship*, p. 72, and fig. 48.

[2] Ἐφημ. ἀρχ., 1889, pl. x, 39.

[3] *Ibid.*, 1888, pl. x, 42. It represents an antelope and tree.

[4] One of these was 12·8 cm. high by the handle, and its recipient 24 cm. wide. The proportions of the other respectively were 5·8 cm. and 12·8 cm.

[5] *Preh. Tombs of Knossos* (*Archaeologia*, lix), p. 49, fig. 46.

[6] Colophonium is turpentine from which the oil has been distilled away.

'The Mace-bearer's Tomb': Tomb 3.

This tomb was discovered on the north edge of the plateau. It was oriented north-south, with the entrance to north, so that the *dromos* had almost entirely disappeared with the gradual denudation of the slope. The upper part of the chamber also had been mostly denuded to about 1·50 m. from the floor, only the south-east corner remaining intact within the bank.

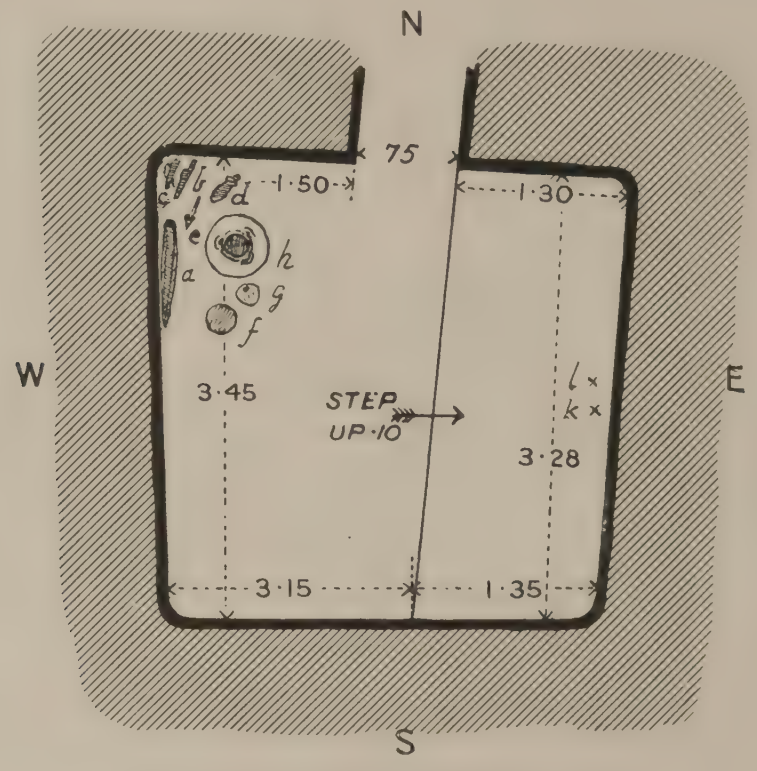
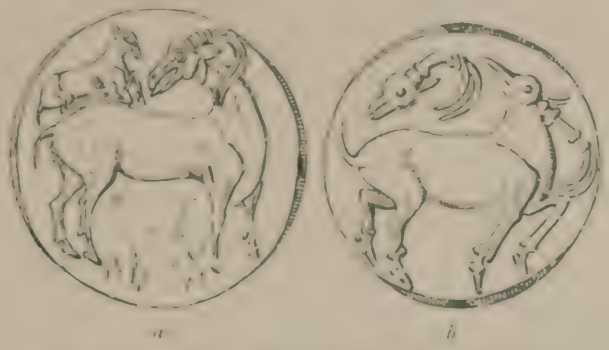


Fig. 19. Plan of Tomb 3: 'Mace-bearer's Tomb'.

The plan of this tomb (fig. 19) formed an irregular square, its front side, 3·55 m., being slightly the broadest. The entrance was closed by a blocking of rubble masonry, which had the appearance of having been disturbed by plunderers and hurriedly built up again. There was a slight step up to the east wing of the chamber.

The central area of the chamber had been cleared out, though two gems (fig. 20, *a*, *b*) were found towards the east wall. The south-west corner, however, seems to have remained practically undisturbed, and here were found several bronzes, including a large spearhead (*a*), two knives (*b*, *c*) and 'razor' (*d*), a javelin-

head (*e*), a bronze mirror (*f*), a beautifully faceted breccia mace (*g*), a decayed paste gem (*m*) and segmented paste beads (*n*), and a large flat alabastron of clay (*o*) with a varied series of designs.



a *b*

Fig. 20. Lentoid intaglios from Mace-bearer's Tomb.

Objects from Tomb 3.

3 *a*. Bronze spearhead, 46·8 cm. long, greatest diam. 4·3 cm., diam. of base of socket 3·2 cm. (fig. 21). Of the same shape as those from the 'Chieftain's Grave', Isopata, and the Shaft Grave, no. 75 (*Prehistoric Tombs of Knossos*, figs. 56, 57, and p. 77), the larger of which was 34·4 cm. long. There are five holes in the base for rivets (fig. 22).

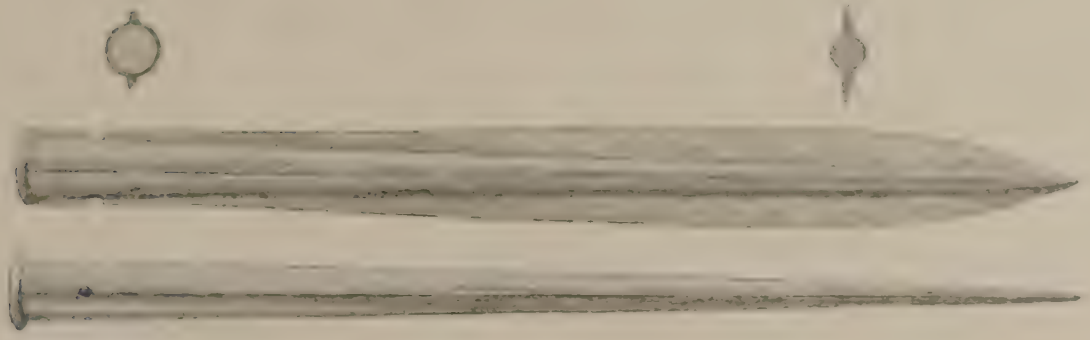


Fig. 21. Bronze spearhead. (c. ⅓)

3 *b*, *c*. Two small bronze knives, broken (cf. *op. cit.*, fig. 71).

3 *d*. Two-edged 'razor' with rounded end. Length, 12·6 cm. (cf. *op. cit.*, fig. 78 and p. 117).

3 *e*. Bronze javelin or arrowhead. Length, 6·7 cm.

3 *f*. Bronze mirror.

3 *g*. Mace of mottled dark brown and white siliceous breccia. Diam. 6 cm. (fig. 25). It has beautifully-formed slightly incurving facets. Height, 5·6 cm., diam. 5·5 cm.

Fig. 22. Bead of vitreous paste.

3 *h*. Three-handled flat alabastron of clay, with decorative frieze. Diam. 35·5 cm., height 9·6 cm. The base has a cruciform design (pl. II and fig. 23, *a*, *b*).

3 *k*. Perforated lentoid intaglio, representing moufflon or large sheep with a smaller animal above his hind quarters (fig. 20, *a*).

3 *l*. Perforated lentoidintag lio Agrimi or Cretan ibex, looking back, and head of another in the field (fig. 20, *b*).

3 *m*. Bead of white vitreous paste with design derived from double axe (fig. 22).

3 *n*. Segmented bead of vitreous paste (fig. 26).

Among the objects discovered in this tomb the clay alabastron (fig. 23, *a*, *b*, and pl. II) undoubtedly presents the most varied interest. In form it fits on to

a *b*

Fig. 23. Clay alabastron from Tomb 3.

Cretan types both of alabaster and painted clay belonging to the Second Late Minoan Period. But the decorated frieze round its lower border is distinctly decadent in design. It has no unity whatever, and is composed of heterogeneous elements including purely ornamental motives. Some, like the trefoil form, show reminiscences of the 'Palace Style', while plant forms of decorative character alternate with others that have some pretensions to be naturalistic. Amidst these appears what seems to be a very rudimentary figure of a flying duck, and a tall, handled vase.

Aquatic birds, in a much superior style however, were already borrowed from Egyptian Nile scenes in the Second Late Minoan Period. They are a very characteristic feature of the succeeding L. M. III, especially on the 'larnakes' or clay sarcophagi; and the tradition of them is maintained in the Cretan geometrical style. In connexion with this subject there may also be noticed on the present vase a very inferior adaptation of an Egyptian clump of lotus flowers and buds.

THREE-HANDLED 'ALABASTRON' FROM MACE-BEARER'S TOMB (3)

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A remarkable and apparently unique feature on the frieze here is the introduction of the tall, handled vessel,[1] supported by a high conical pedestal. It somewhat recalls the curious decorative 'stands'—hitherto unexplained—introduced into the design of certain Geometrical Vases. Nondescript figures of this class also associated with ducks appear on the frieze of a Geometrical Vessel of a curious polychrome class from an 'oven' tomb excavated by me at Knossos (fig. 24). 'Stands' of a different character but perhaps of similar descent are also found in certain Late Dipylon Vases from Athens.[2] The underlying Minoan and Mycenaean element in the repertory of the Greek Geometrical styles is becoming every day more evident.

Fig. 24. Section of decorative band on 'Geometrical' vase, Knossos.

The present alabastron belongs to the same date—Early L. M. III—as many of the vases from the cemetery of Zafer Papoura, and illustrates the rapid deterioration of Minoan ceramic design that followed the fall of the Knossian Palace. The technical skill to a great extent survives, but the higher artistic inspiration has for ever vanished.

The facetted mace of hard siliceous breccia[3]—possibly itself an heirloom—is of finer work than any known example of such objects from the island. Stone maces were already known in Crete in the Neolithic Age.[4] That they were

[1] Small vessels (white on the black ground) are occasionally introduced into the field of vases of the first Middle Minoan period. Conical 'skytotes' also appear in company with double axes and other sacred objects on vases of the 'Palace Style' (L. M. II) from Knossos. But otherwise such types seem to be quite unknown to the repertory of the Minoan vase painters.

[2] E. Pernice, *Geometrische Vasen aus Athen* (*Mitth. d. k. d. Inst.*, xvii (1892), p. 205 seqq.).

[3] An identical breccia, as Monsieur L. Franchet kindly informed me, is found at Kakon Oros near Candia. It is similar to that used for the Early Minoan Vases found at Mochlos, but contains less peroxide of iron.

[4] See my *Nine Minoan Periods*, pp. 15, 16, and fig. 15.

exceptionally used down to the close of the Middle and the beginning of the Late Minoan Age is shown by an example from Hagia Triada and a fragment of another from the Temple Depositories at Knossos. It is clear that such a decorative mace as that shown in fig. 25 could not have been used for warlike or other practical purposes, and we may infer that it belonged to a ceremonial class and was probably a badge of office. Its use may indeed be regarded as an instance of religious survival, and it is not improbable that the Mace-bearer interred in this tomb had fulfilled some sacral function.

The segmented or 'compound' bead (fig. 26) of pale vitreous paste is interesting as supplying another Cretan example of a class of bead of Egyptian derivation, later offshoots of which occur in early Bronze Age interments of the British Isles. Like an analogous specimen from the L. M. III Cemetery at

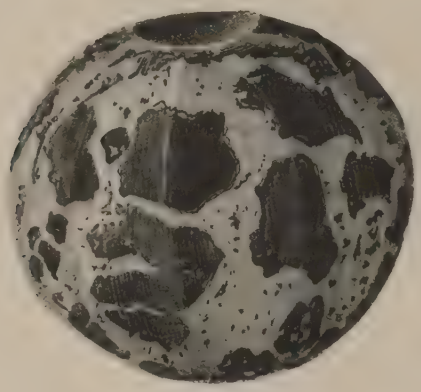


Fig. 25. Faceted mace of siliceous breccia.

Fig. 26. Segmented bead of vitreous paste.

Phaestos, this bead is of Cretan fabric, and it is possible that Minoan maritime enterprise may have contributed to spread similar types to the Western Mediterranean shores.[1] The Mace-bearer's Tomb in which the present example was found probably dates from the first half of the fourteenth century B.C.

Tomb 4.

This tomb came into view a few paces north-east of the preceding. Of the *dromos* only 4·70 m. was preserved. Like Tomb 3, it was oriented north and south, with the entrance to the north.

The doorway had been roughly blocked by a dry walling, preserved to a height of 1·55 m. from the floor.

[1] I may refer to what I have already said on the diffusion of these beads in *Proc. Soc. Ant.*, xxii (1907), p. 123 seqq.

The tomb, as will be seen from the plan (fig. 27), was badly formed, with an irregular projection in its north-east corner. The roof had fallen in, and some vases, an 'amphora' with scale pattern (fig. 28), and another (fig. 29), two squat alabastra of clay (fig. 30), and a bronze pan, had apparently been preserved *in situ*. But, with the exception of a small gold ring, its more valuable contents had evidently been abstracted, nor was there any remaining trace of human remains.

Fig. 27. Plan of Tomb 4.

OBJECTS FROM TOMB 4.

4 *a*. Three-handled 'amphora', with scale pattern. Degenerate foliate pattern below collar. Height, 33·7 cm. (fig. 28).
4 *b, c*. Two clay 'alabastra'. Diam. 17 cm. (fig. 30).
4 *d*. Fragments of similar clay 'alabastron'.
4 *e*. Plain bronze, handled pan. Diam. of pan, 25 cm. (fig. 31).
4 *f*. Smaller clay 'amphora', with plain chevron pattern (fig. 29). Height, 15·6 cm.

This tomb, to judge from the somewhat decadent style of the vases, dates from about the same time as no. 3.

Fig. 28.

Fig. 29.

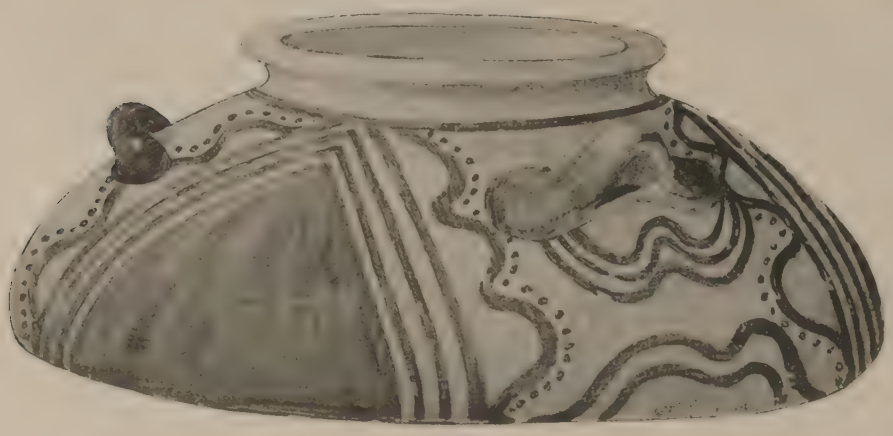


Fig. 30.

Figs. 28 30. Painted vases from Tomb 4.

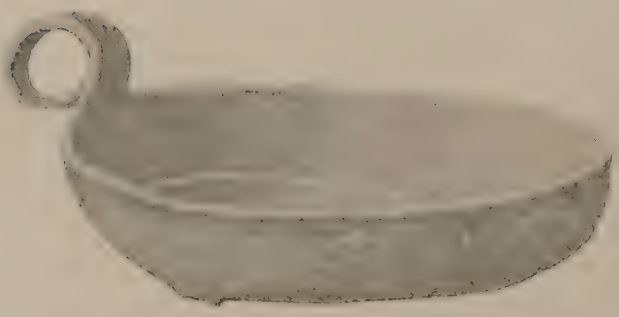


Fig. 31. Bronze pan from Tomb 4.

The Tomb of the Polychrome Vases.

Tomb 5.

Cuttings in the bank south-west of Tomb 4 brought out the *dromos* of another. This was traced, by a steep downward incline of about one m. in three, in an easterly direction, gradually attaining a width of 1·87 m. At 13 m. from the first appearance of the passage in the bank, the doorway of a fine rock-cut tomb appeared with its opening to the west. A little before reaching this, a somewhat ominous discovery was made in the shape of remains of a Geometric Vase. No

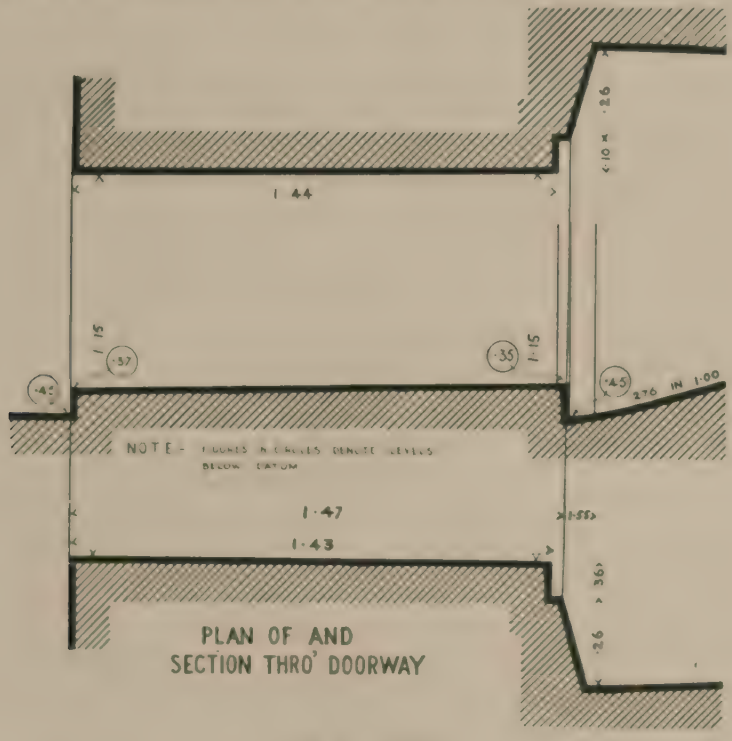


Fig. 32. Tomb 5.

blocking was found to the entrance. There can be little doubt, therefore, that the chamber was plundered by the early Greek settlers, somewhere about 1000 B.C.

The doorway itself, which was filled with mere rubble, was of a plain rectangular outline, the threshold slightly stepping up (fig. 32). Its height was 2·9 m., and width 1·20 m. It will be seen that the door-opening was framed within a slight recess and bevelling. Mr. Doll's plan and section of the whole tomb, including the *dromos*, is given in pl. III. A remarkable feature of the entrance was that it contained no regular blocking. The doorway was simply

filled with débris, and the few stones included in this were not built in any way. 'This lack of any blocking', as Dr. Mackenzie observes, 'would indicate that the plunderers had not the same regard to appearances as tomb-robbers usually have who carry on their operations in the same generation to which the tombs belong. This would be natural if the tomb-robbers were the same "Geometric" people who left their water-pot in the *dromos*.'

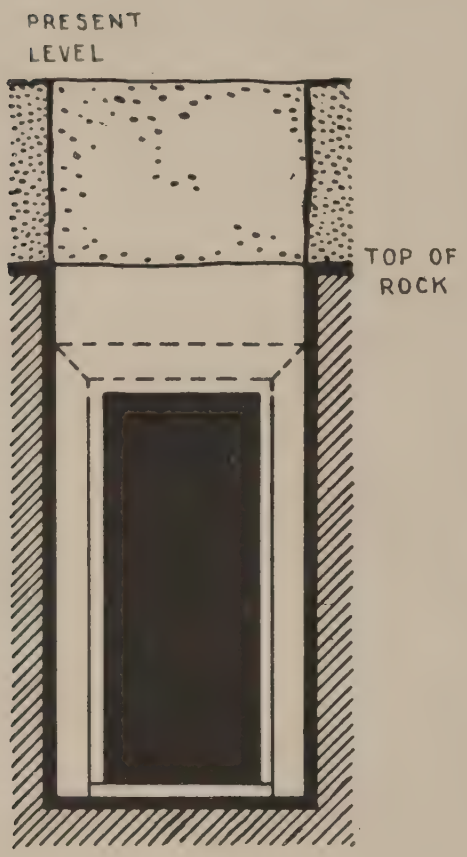


Fig. 33, *a*. Entrance of Tomb 5.

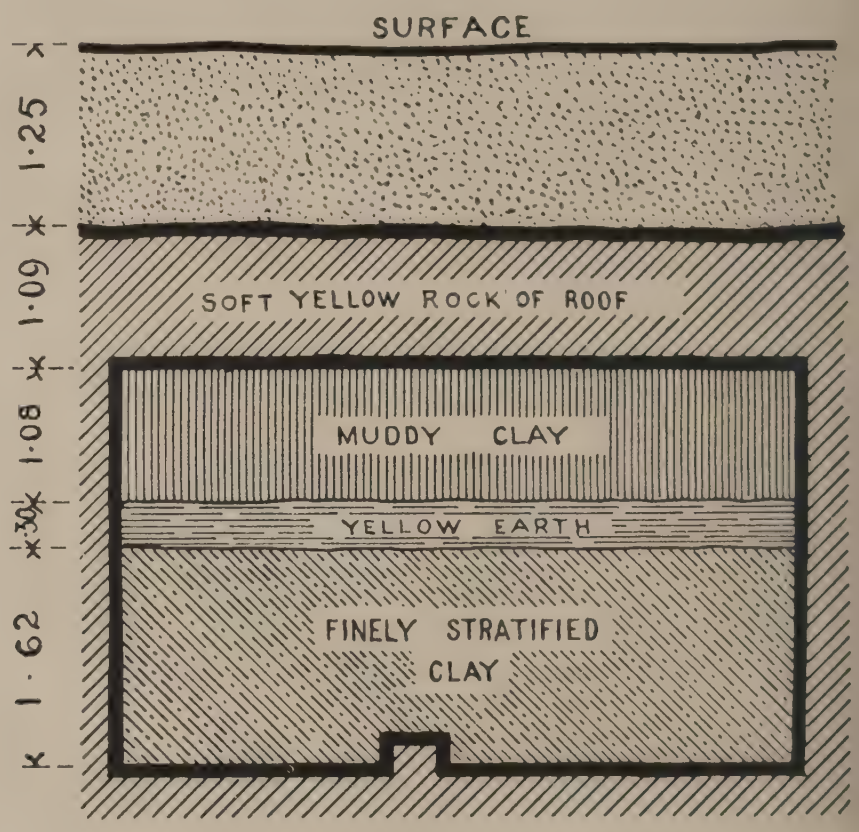
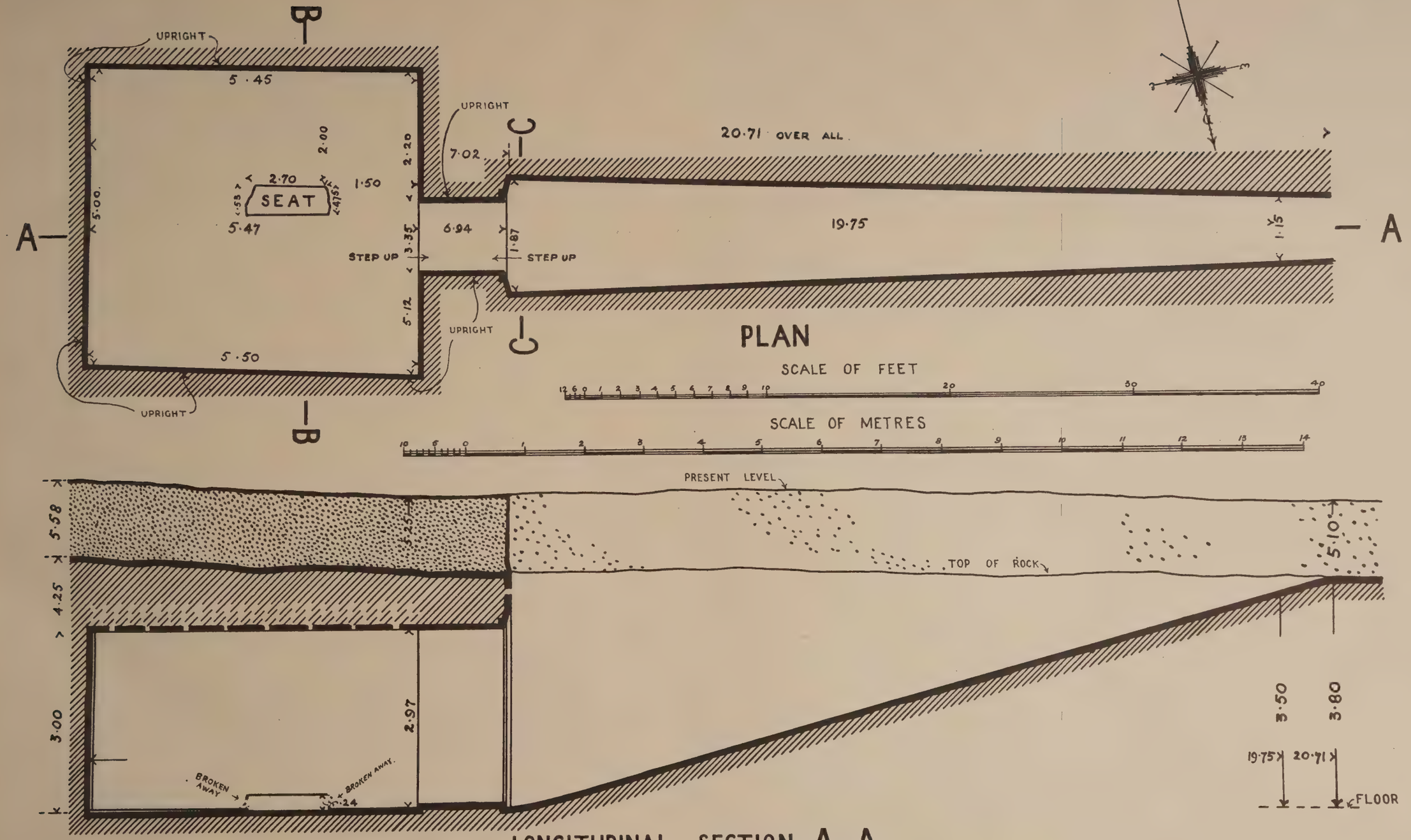


Fig. 33, *b*. Section of Tomb 5, showing stratification.

The whole floor of the chamber had been filled to a depth of somewhat over a metre and a half with finely stratified clay. Above this was a stratum of about a third of a metre, consisting of fallen fragments of the soft yellow rock from the ceiling. Above this again was muddy clay, 1·08 m., consisting of infiltrations that had taken place after the collapse of the lower surface of the roof. Remains of the original roof, of soft yellow 'kouskouras' rock, were preserved above this to a thickness of a metre and a quarter (see section, fig. 33).[1]

[1] The stratification here shown is based on very careful observations made by Dr. Mackenzie.



PLAN AND SECTION OF TOMB 5

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CHRISTIAN. C.T. DOLL
MENS ET DELT 1910.

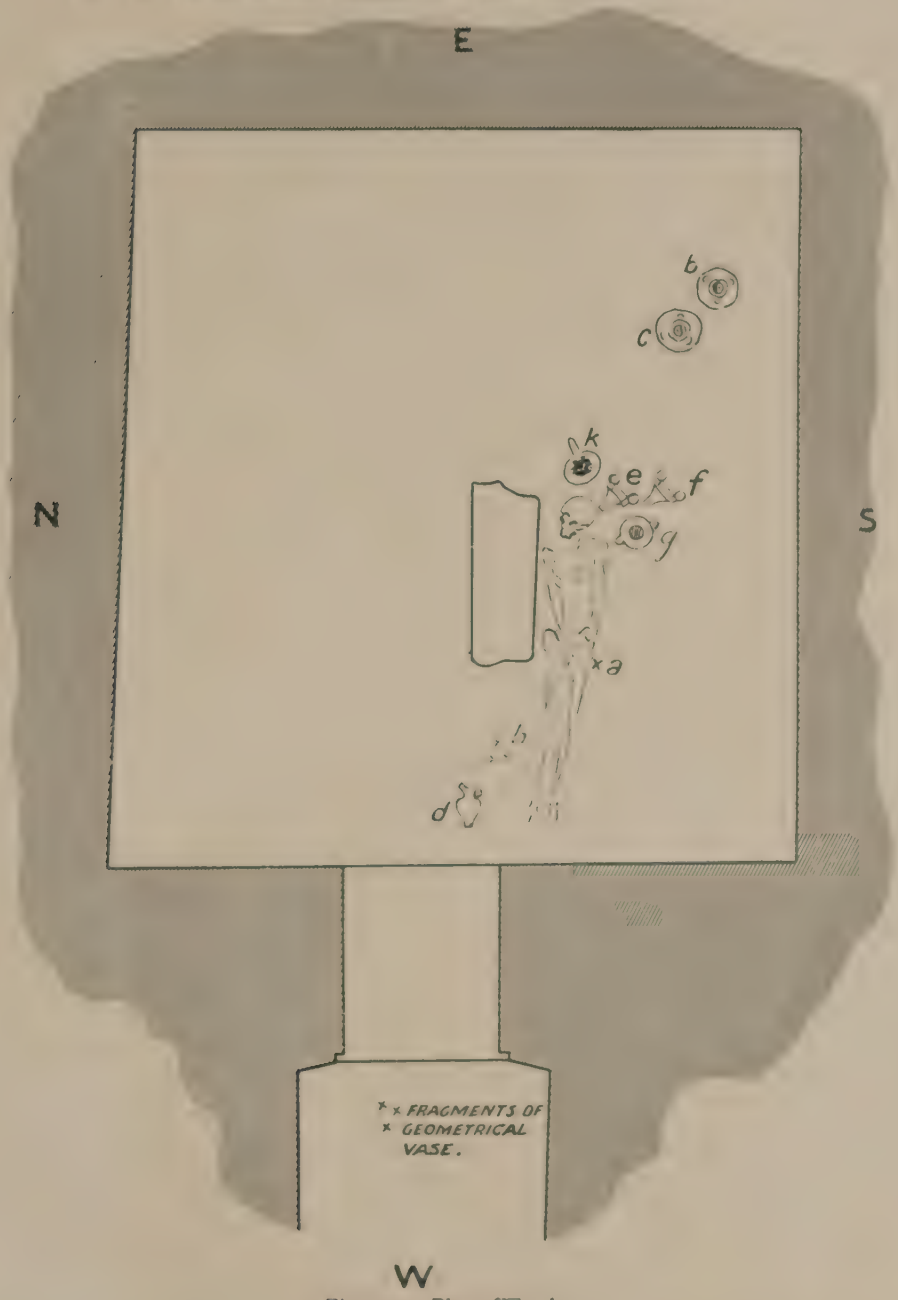


Fig. 33, *c*. Plan of Tomb 5.

The stratification thus shown is of interest as revealing two considerable periods in the history of the tomb. The first of these was marked by a gradual infiltration of finely stratified clay, the effect of the wash of successive winters' rains, from the direction of the entrance passage. As this clay deposit lay above

the disturbed contents of the chamber, it must have been formed after the plundering of the tomb, and as a consequence of the breaking through of the original blocking of the doorway. Next, there followed a heavy fall from the soft rock ceiling, and the less even deposit of muddy clay above this was probably due to infiltrations of the surface earth that now set in.

The chamber itself, which was very finely hewn out of the soft 'kouskouras' rock, proved to be one of the largest among the private tombs yet explored in the neighbourhood of Knossos. Its outline was roughly square, the front and back a little over five metres in width, the sides nearly six[1] (fig. 33, *b*). The original surface of the rock ceiling three metres above the floor had for the most part fallen away.

A remarkable feature of this chamber was the appearance towards the middle of a stone bench, or basis, cut out of the rock. It followed the line of the major axis of the tomb, but had been broken off at the two ends, the remaining part being about 1·20 m. in length. Its mean breadth was about half a metre, and its height about 30 cm. A transverse section of this ledge is shown in fig. 33, and its longitudinal appearance is given in the plan and section given in pl. III.

Immediately on the right side of this stone ledge, near its inner extremity were remains of a skull turned over, and other parts of the skeleton (including the leg bones), in a much decomposed condition, lay between this and the right corner of the doorway. The body, therefore, had been buried with its feet towards the entrance.

Fig. 34. Silver ring, Tomb 5. (½)

About the middle of the human remains lay a plain silver ring (fig. 34), and the other more or less perfect relics found in the chamber all lay in the southern section of the tomb.

A little further in than the skull were two large clay vessels of the flat 'alabastron' type, presenting remains of a black coating (fig. 35). Immediately behind the skull was a clay brazier full of charcoal (fig. 38), and near this remains of three remarkable ritual vessels, to be described below, covered with a kind of polychrome decoration (pl. IV, and fig. 37, *a*, *b*). Fragments of another were found by the entrance, and inside the entrance a beaked ewer, also with traces of polychromy.

Contents of Tomb 5.

5 *a*. Silver ring with overlapping coil. Diam. 2·2 cm., interior diam. 1·8 cm. (fig. 34).

5 *b*. Squat vessel of 'alabastron'-like shape, coated with a kind of black 'varnish'. Diam. of base, 33·3 cm.; height, 9·3 cm. (fig. 35). This type of 'alabastron' is remarkable for the sharp transition from the lower rim to its base.

[1] The measurements, as shown in Mr. C. T. Doll's plan (pl. III), are: width of front wall, 5·12 m.; back, 5·0 m.; north side, 5·50 m.; south side, 5·45 m.

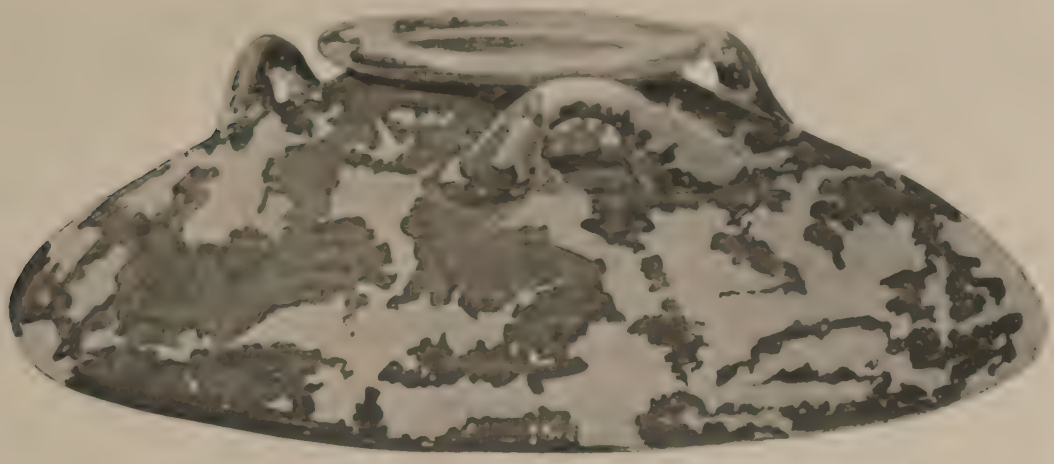


Fig. 35. Clay 'alabastron' from Tomb 5, showing traces of black 'varnish'. (⅔)

5 *c*. Ditto. Diam. 35 cm.; height, 10 cm. (Now at Oxford.)

5 *d*. High-beaked ewer, with the same black coating as *a* and *b*. It also shows slight traces of bright red pigment of a powdery nature. Height, 22·5 cm.; diam. 16·8 cm. (fig. 36).

5 *e*. High goblet with two coiled handles. It bears a spiraliform design in 'kyanos' blue, with black outlines on a Venetian red ground, and horizontal bands with the same colouring. The outer face of the handles is also coloured blue. Round the margin are a series of red discs—a Middle Minoan polychrome tradition. Height, 28 cm. (pl. IV.)

5 *f*, *g*. A pair of vases,[1] similar in form to the last but somewhat smaller. They are both of the same dimensions, and exhibit identical designs. The spiraliform decoration that covers the whole field of *e* is

Fig. 36. Beaked ewer from Tomb 5, *d*, with traces of black coating and red pigment. (*c*. ⅓)

[1] Thanks to the skill of Mr. W. H. Young, of the Ashmolean Museum, these were reconstituted from a promiscuous mass of fragments. One is now in the Museum at Candia, the other in the Ashmolean.

here interrupted on opposite sides of the vessels respectively by figures of an 8-shaped Minoan shield and of a crested helmet with ear-pieces, resembling those worn by the pugilists on the steatite rhyton from Hagia Triada. Height, 22·8 (to level of rim) and 21·2 cm. (fig. 37, *a*, *b*).

5 *h*. Fragmentary remains of polychrome vase, resembling *e*.

5 *k*. Chafing-pan of plain clay. Diam. from end of handle to rim, 38 cm. (fig. 38).

The most interesting phenomenon presented by this tomb is the group of vessels decorated with imperfectly fixed colours, which in the case of the high goblets with the double coils to their handles (pl. IV and fig. 37, *a*, *b*) have a brilliant polychrome effect.

The existence of a Late Minoan polychrome class of vessels decorated with black, 'kyanos' blue, and ferruginous red pigment was already noted in my former work on the *Tombs of Knossos*.[1] The vases in this case belonged, as their associations showed, to a somewhat later date, the early part, namely, of the Third Late Minoan Period. Among the colours presented by them, in addition to the 'kyanos' blue, black, and 'Venetian' red, there also occurred a more crimson tone of red.

The great interest of this practice of adorning clay vases with brilliant and, in the case of the 'kyanos', imperfectly fixed colours lies in the evidently religious intention with which it is inspired. Vessels like these adorned with the powdery Egyptian blue could not have stood the wear and tear of daily handling. They were devised *in usum mortuorum*, and we see here in fact a survival, in connexion with the dead, of the polychrome tradition of the Middle Minoan Age. It is to be observed, however, that the Egyptian 'kyanos' here present, in addition to the traditional black and red, is itself a 'Late Minoan' characteristic. The pink pigment of cups and bowls from Tomb 66 of Zafer Papoura is also new.

In spite of the black-ground tradition of the Middle Minoan style, the remains of the black coating on some of these vessels, such as the flat 'alabastra' (fig. 35), without apparent relief in the shape of bright-coloured ornament, is surprising. It is possible, however, that it was accompanied with some polychrome decoration that has entirely disappeared. On vessels from Zafer Papoura we see the 'kyanos' blue decoration, together with powdery ferruginous red, overlaid on a black base, and traces of a vermilion-like pigment are visible above it in the case of the ewer, fig. 36. On the other hand, it is by no means improbable that in certain cases these black 'varnished' vessels may have been wholly or partly covered with the gold foil which is of such constant occurrence in Minoan deposits, and that this may have been peeled off by early plunderers of

[1] p. 72, no. 66, *h*–*m*.

POLYCHROME GOBLET FROM TOMB 5

Published by the Society of Antiquaries of London, 1914

the tomb. An analogous practice is well authenticated in the case of vases of dark steatite with reliefs, which were decorated with thin gold plate.

The most remarkable of the polychrome vessels are the high two-handled goblets (fig. 37*a*, *b* and pl. IV). The handles on these recall the triple, coiled handles of the well-known alabaster vase from the Fourth Shaft Grave at Mycenae. Coiling handles of this kind, however, were already known among the ceramic

Fig. 37, *a*.

Fig. 37, *b*.

Polychrome goblets from Tomb 5.

types of the finest polychrome class of the Second Middle Minoan Period, though, so far as I am aware, only fragmentary evidence of this exists.

For the dating of this form of goblet a very important piece of evidence is supplied by the contents of a chamber in the Little Palace or Royal Villa of Hagia Triada, explored by Professor Halbherr. The latest remains of this building still belong to the First Late Minoan Period, and in the chamber in question there were found several vases of a type identical with those from the Isopata Tomb. The height of one of those that it has been possible to restore

[1] A complete specimen of one of these is exhibited in the Candia Museum.

is 25·8 cm. to the upper rim of the recipient, and 34·3 to the top of the handles dimensions which agree very well with those from the tomb. The handles with their double coil, and the whole contour of the vessel, show an exact correspondence. The surface of the restored vessel had suffered too much from fire and exposure to show any traces of the original colouring. One at least of the associated vessels, however, illustrated the same survival of polychromy as is seen on the Isopata goblets.

These associated vessels, moreover, gain additional interest from the fact that they were probably of a ritual class. They included two varieties of brazier or chafing-dish, one of them the exact counterpart of that found in the present tomb (cf. fig. 38). The other belongs to a class of vessel well known from the beginning of the Middle Minoan Age, with a bossed pan. The charcoal was in this case inserted from below into its globular inner receptacle, the continued

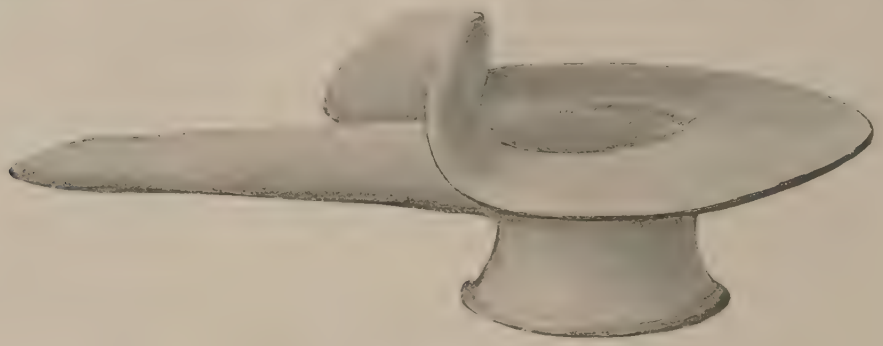


Fig. 38. Clay brazier from Tomb 5.

combustion being made possible by air-holes in the bottom of this. The specimen found in this chamber was supported on three short legs.[1] It showed the lilac-brown ground of M.M. III tradition, and within, a white central rosette surrounded by spirals. The other vessel (fig. 39, *a*, *b*)[2] was a handled pan like those from the tombs and bore a polychrome decoration very similar to that of the Isopata goblet. The interior of the vessel showed faint traces of a 'kyanos' blue design surrounded by a white ground, with a 'Venetian' red border, while on its outer border were petals in the same red on a white ground, the whole on a black base. The 'Egyptian blue' was painted on the black glaze after firing.

Mr. Noel Heaton, F.C.S., who with Professor Halbherr's permission made an analytical examination of fragments of the coating of the above vessels from Hagia Triada, was able to arrive at some interesting conclusions regarding the technique employed.

[1] The width of the basin was 24·5 cm., and its height 19 cm.

[2] The width of the pan of this vessel was 24 cm.; its height 12·5 cm.

The basis of the painted decoration in these cases seems to have been a thin coating of plaster, the process thus bearing a distinct resemblance to the fresco decoration of the Palace walls. As in the latter case, the white body consists of practically pure carbonate of lime, and the red is the same pigment as that used in the wall paintings. As Mr. Heaton justly observes, 'such a thin coating of plaster would not be calculated to resist prolonged burial well, and it has been dissolved away to a considerable degree by continual exposure to moist soil'.

Fig. 39, *a*. Painted clay braziers from Hagia Triada. Fig. 39, *b*.

The process employed in the case of the polychrome vessels from Isopata is not so clear, but the parallelism in form and colouring presented by the Hagia Triada examples is itself a highly suggestive phenomenon. With regard to the black coating visible on the 'alabastra' and jug, Mr. Heaton observes that 'there is a distinct departure from the ordinary technique on such vases', though the black proves to be a glaze somewhat similar in character to that ordinarily used.[1]

[1] Mr. Heaton observes with regard to an idea that had suggested itself in relation to the black coating, 'there is no indication of after decoration with bituminous or other materials to produce the black'.

The parallel vessels from Hagia Triada have a special bearing on the date of this Isopata tomb. The Little Palace or Royal Villa of Hagia Triada was destroyed before the close of the First Late Minoan Period, and all the associated relics belong to that epoch. It is clear, therefore, that in the 'Tomb of the Polychrome Vases' we have an example of a L. M. I burial. It is somewhat earlier in date, therefore, than Tomb 1 and the 'Tomb of the Double Axes' (no. 2) to be described below, which from its associated 'Palace Style' pottery can be shown to belong to the succeeding, Second Late Minoan Period.

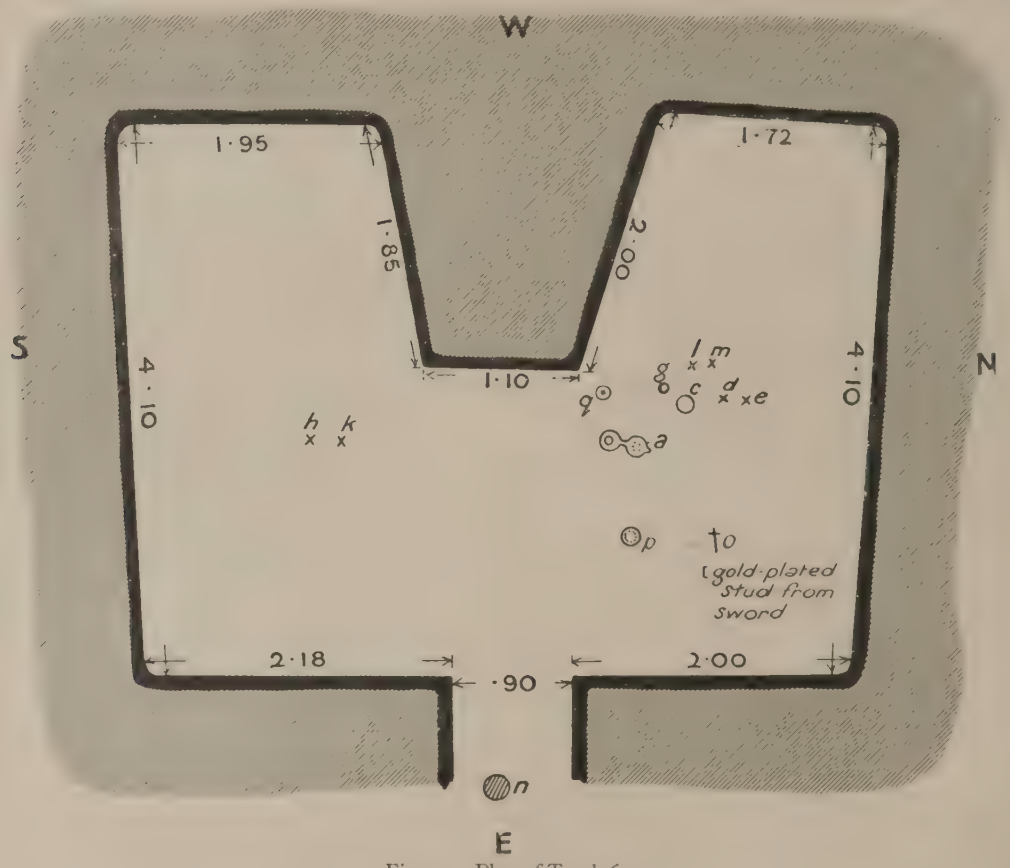


Fig. 40. Plan of Tomb 6.

Tomb 6.

The Sixth Isopata Tomb was discovered near the south-east corner of the same vineyard, on the west borders of which was discovered the 'Tomb of the Double Axes' (no. 2). It was entered from above the doorway, which was found to lie east of the chamber.

The chamber itself had been greatly denuded and its contents a good deal broken and disturbed. It was of square outline, about five and a half metres wide by slightly over four deep, and like the 'Tomb of the Double Axes' presented the peculiar feature of a pier running out to a distance of about two metres from its back wall. (See plan, fig. 40.) This rock-cut pier no doubt served a useful constructive purpose in helping to support the roof. The parallelism presented with the larger tomb, however, in which a half column was actually carved on the front face of the pier, shows that it was probably taken to represent the central pillar or column that forms the distinguishing feature of a class of Minoan chambers—some of them certainly of a religious character.

Fig. 41, *a*. Gold ring. (½)

Fig. 41, *b*. (⅔)

Fig. 42. 6 *l*. Faience *Trochus* shell. (⅔)

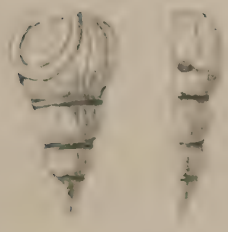


Fig. 43. 6 *m*. Faience shell. (⅔)

Fig. 44. 6 *a*. Clay mannikin. (½)

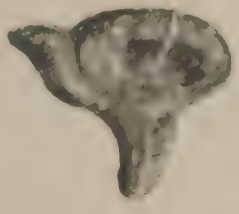


Fig. 45 6 *c*. Clay bird. (½)

In the centre of the right space of the tomb was found the base of a polychrome vessel of the ritual class, with traces of 'kyanos' pigment. By it was a gold ring (fig. 41, *a*), the inner diameter of the hoop of which was only 1·5 cm., too small for the fingers of an adult. The bezil of this ring bore a curious though roughly executed design of two somewhat short-skirted female figures—apparently Minoan Goddesses with a pillar shrine and sacred tree behind each (fig. 41, *b*). They are depicted as grasping each other's hands in a manner suggestive of the 'tug of war', but which may be more probably interpreted as a very emphatic sign of agreement. Near this were imitations of shells, *Trochus* and *Nassa*—or possibly *Scalaria*—in vitreous paste (faience) (figs. 42, 43). Beside these objects lay two rude clay figurines, one apparently of a mannikin (fig. 44), the other of a bird, perhaps a flying dove (fig. 45). A larger bird's head with prominent

eyes was found near, and it is natural to associate these objects with the cult of the Dove Goddess.

With this head was a curious double vase (fig. 46), with plant and flower designs of a conventional kind and foliate borders. The floral decoration of this shows points of similarity with that on the large painted 'alabastron' from Tomb 3 (fig. 23, above). Scattered fragments of a small clay 'alabastron' of this type were found in the present tomb.

It will be seen that one part of this double vessel has a large mouth with a number of small holes to serve the purposes of a strainer. The other half has

Fig. 46. Double vase from Tomb 6. (*c.* ½)

an ordinary mouth above, the top of which was, however, broken. Between the two recipients was a tubular connexion. It looks as if the broad mouth with the strainer had been devised for dipping into water which might contain tadpoles or other undesirable objects, animate or inanimate. The water could then be poured from the other part of the vessel. Oriental ewers are, in fact, frequently provided with strainers of this kind.

That this grave had once contained a richly mounted gold sword or dagger was shown by the occurrence, a little east of the objects above referred to, of the flat circular head of a bronze stud (*o*), coated with gold plating. It exactly resembled the studs on the swords of the 'Chieftain's Grave' at Zafer Papoura.[1]

[1] *Prehistoric Tombs of Knossos*, pp. 56, 57 (*Archaeologia*, lix).

Near this were fragmentary remains of a cylindrical box or 'pyxis' of green serpentine. It was provided with a lid showing two lines of perforations, and the projecting rim of the base similarly bored. The pyxis had a horizontal ribbed decoration. There was also a lid of a smaller one of the same material. In the middle of the left wing of the chamber were three globular gold beads (*h*) and oval beads of brilliant 'kyanos' paste (*k*).

In the doorway was found a bronze mirror of the usual type, and in the left half of the tomb three hollow globular gold beads, and others of brilliant 'kyanos' blue and sub-oval form. This latter group of relics points to there having been a female interment in addition to that of the owner of the sword.

The decoration of the double vase points to the period of the Zafer Papoura interments, and belongs to the Age of incipient decadence (L. M. III *a*) that succeeded the fall of the Knossian Palace.

Objects from Tomb 6.

6 *a*. Double vase (see above). Height to top of handles, 15·4 cm. (fig. 46).
6 *b*. Fragments of small clay alabastron of the type given in fig. 30 above. They show traces of a waved pattern. Original diam. about 14 cm.
6 *c*. Base of vase with traces of polychrome colouring, red and kyanos.
6 *d*. Clay 'mannikin' (fig. 44).
6 *e*. Clay bird, perhaps a dove. Length, 3 cm. (fig. 45).
6 *f*. Head of clay bird, perhaps dove, with prominent eyes.
6 *g*. Gold ring, with Goddesses(?) grasping each other's hands and pillar-shrines. Inner diam. of hoop, 1·5 cm. (fig. 41, *a*, *b*).
6 *h*. Three globular gold beads.
6 *k*. Beads of brilliant kyanos blue, of elongated oval shape. Length, 0·5 cm.
6 *l*. *Trochus* shell in vitreous paste, with pale lilac glaze; perforated (fig. 42).
6 *m*. *Nassa* or *Scalaria* shell in similar material to *l*. White glaze with purplish bands; perforated (fig. 43).
6 *n*. Bronze mirror. Diam. *c*. 8 cm. (fragmentary).
6 *o*. Bronze stud of sword, coated with gold plate.
6 *p*. Fragments of green serpentine 'pyxis' (see above). Diam. of base, *c*. 5 cm.
6 *q*. Lid of smaller 'pyxis' of green serpentine. Diam. 2·2 cm.

§ 3. *The Tomb of the Double Axes.*

Tomb 2.

The second of the new series of graves explored at Isopata is of such exceptional interest, both from its form and contents, that it is best dealt with in a separate Section.

The first clue to the existence of this tomb was supplied by the cutting of

its *dromos*, which was struck at a point 14·80 metres north of the entrance. The *dromos* itself had been of greater extension, but the denudation of the face of the slope had obliterated its original opening. Its breadth gradually widened in the course of its descent from about half a metre to slightly over a metre and a half (1·55).

The orientation of the tomb was almost due north and south, the entrance being on the north. The doorway itself had been hewn out of the soft 'kouskouras' rock with extraordinary care, and the workmanship was superior to anything

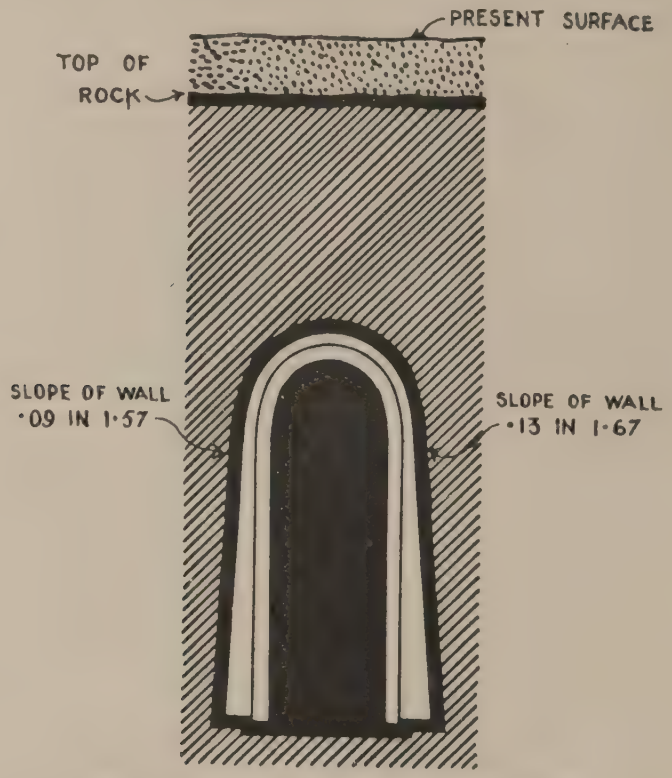
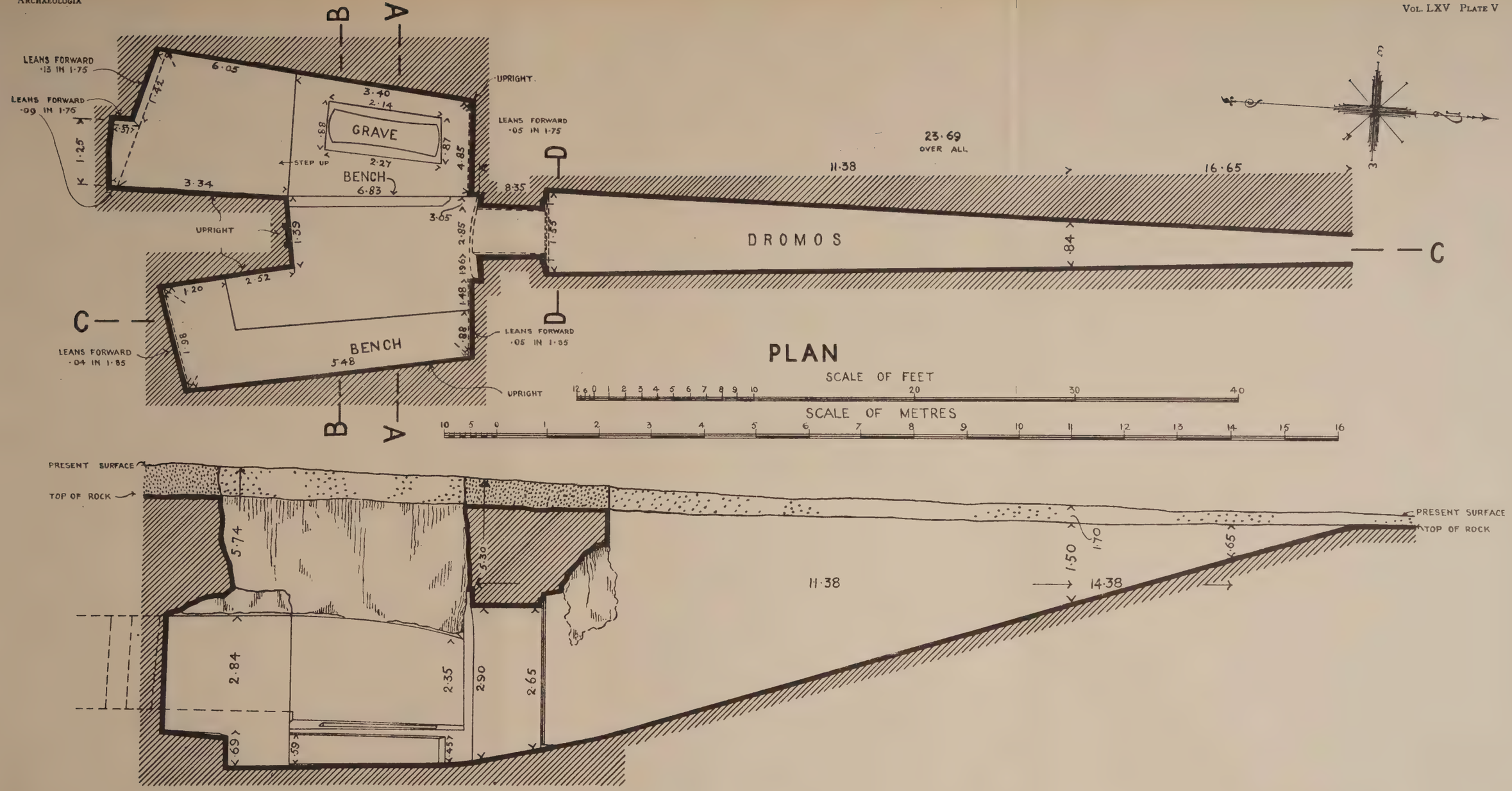


Fig. 47. Entrance to the Tomb of the Double Axes.

that had come to light in the cemetery of Zafer Papoura. The inner arch was 0·97 m. wide and 2·60 high, with a recessed border round it (fig. 47).

The doorway was blocked to a height of 1·50 m. with limestone blocks, some of which were well faced like those of ashlar masonry. The gap between the top of the blocking and the arch of the doorway showed at once that the tomb had been broken into in ancient times. On removing the blocking, a bronze double axe (fig. 48) was found among the stones near its inner face, at a height of 1·20 m. above the floor-level. From this it would appear that the blocking



LONGITUDINAL SECTION C.C.

PLAN AND SECTION OF TOMB OF DOUBLE AXES (2)

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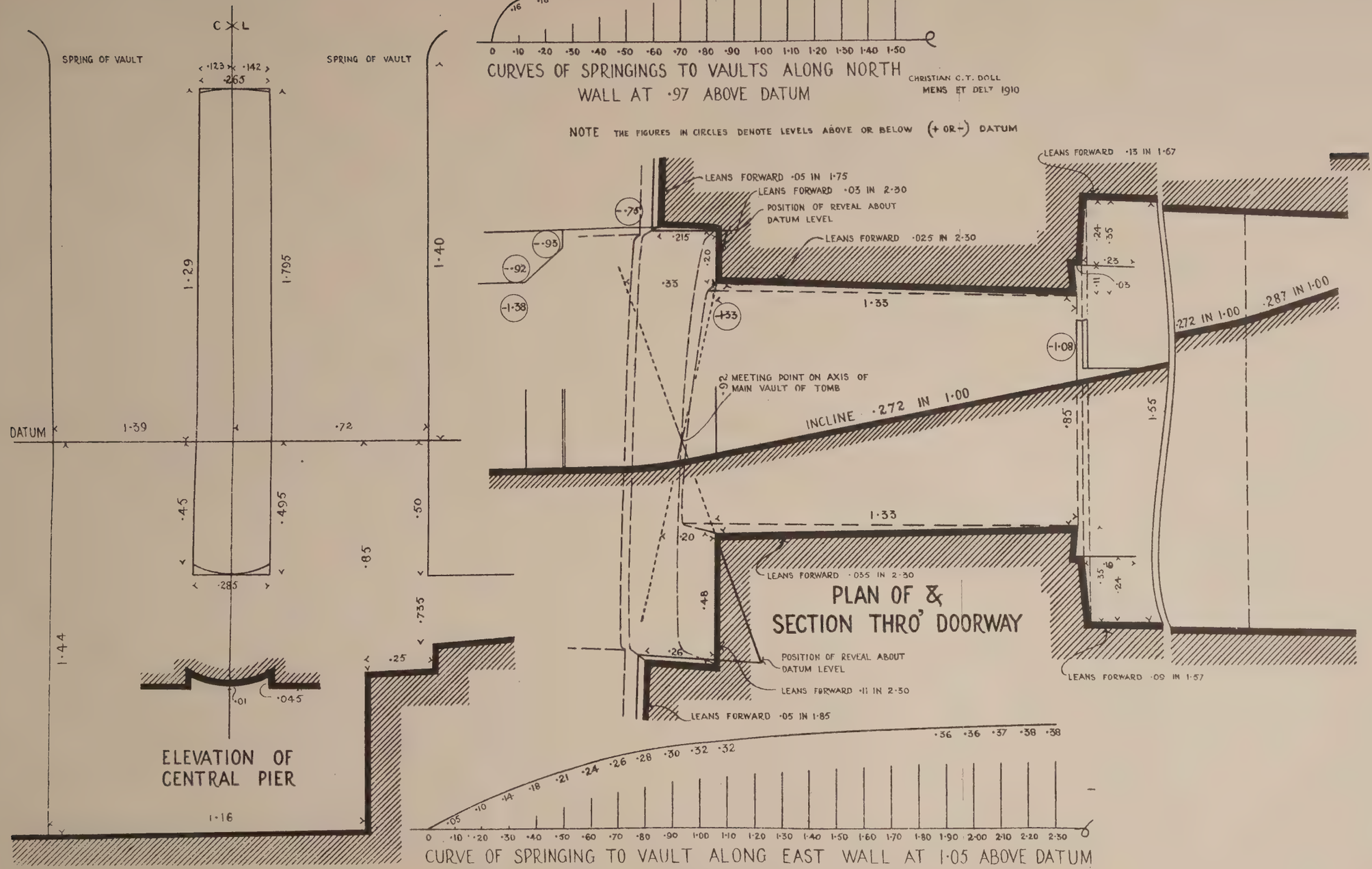


SECTION AND ELEVATION OF CENTRAL PIER WITH COLUMN, AND PLAN AND SECTION OF DOORWAY: TOMB OF DOUBLE AXES

Published by the Society of Antiquaries of London, 1914

wall, at least above this level, had been at some time methodically removed and replaced. The subsequent effraction of the upper part is a very different story.

As the removal of such a blocking wall, three layers thick, and its careful replacement would involve serious and leisurely work, we must infer that it was removed with the cognisance of the family concerned and for some overt reason. The most natural supposition would be that there was a fresh interment. Of this, however, there was no trace, and it seems necessary to seek another explanation. Since, moreover, it is by no means an unusual case that when graves are reopened for this purpose valuable or useful objects are abstracted from a previous deposit, it is possible that the bronze double axe may have been accidentally left among the blocking stones on such an occasion when other implements were carried off.

Fig. 48. Bronze double axe from Tomb of the Double Axes (2).

The peculiar character of this remarkable tomb makes it possible that in this case the explanation of its reopening may be afforded by some religious commemoration. The solitary cist found within looks as if the sepulchral chamber had been intended for a single occupant. On the other hand, as will be seen below, this tomb was at the same time a shrine.

On clearing out the chamber it proved to be of a complex form altogether unique among any existing Minoan or Mycenaean tombs. In its extreme depth the chamber went back from 5·48 to 6·83 m., its breadth varying from 5 to 6·30 m., while the height of the central section was about 3·60 m.[1] (See plan, pl. V.)

[1] For all details reference must be made to the very exact measurements of Mr. C. T. Doll's plans and sections (pl. V and figs. 47, 50, 51, 53, 72).

One of the first features to strike the eye in this interesting sepulchral chamber is its perspective arrangement. The example set by the gradually expanding lines of the entrance passage seems here to have been followed in laying out the chamber itself, with a certain accentuation of angles. The main axial lines of the chamber thus radiate from its entrance side, as if to give greater scope for the tripartite distribution of its inner border. This nicely adjusted radiation of the perspective lines in the case of the present tomb contrasts with the quadrangular outlines of other sepulchral chambers of the same group. The perspective of the central pillar, however, finds a close parallel in Tomb 6.

Immediately opposite the doorway, and dividing the back part of the chamber into two recesses, is a projecting buttress of soft rock. Whether this projection was actually necessitated or not by some rotten conditions in the roof, it is clear that the intention here was to assimilate it with the central supporting pillars either of the 'Pillar Rooms' so characteristic of Minoan buildings, which in many cases are clearly shown to have had a religious connexion, or of chambers with a central column answering to them on the floor above. This central pier, as already noticed, is itself paralleled by a similar projection in Tomb 6. In the present case, however, a remarkable detail is added to the pier. On the face of the rock buttress was cut a half column in low relief, an entirely new feature in Minoan tombs (fig. 49, and see pl. VI). The column was preserved to a height of about 1·80 m., but unfortunately, owing to the falling in of the centre of the vault, was broken away about the point where the capital may have been cut out. This column seems to mark the chamber as a symbolic reproduction, not so much of the crypt below with its supporting pillar, as of the columnar sanctuary itself.

The half column here cut on the face of the pier differs from the ordinary type of Minoan and Mycenaean column, as illustrated by a numerous series of representations in frescoes, ivory reliefs and gems, in showing no signs of a taper towards its base. Roughly, its two outlines seem to have been laid out as parallel, and as a matter of fact, according to Mr. Doll's very careful measurements (see pl. VI), the diameter of the base in this case is slightly greater than that of the summit, 0·285 m. as against 0·265.

The roof of the chamber had fallen in, but from the remaining indications of the cutting in the soft rock, visible above the top of the column on one side, and of the doorway on the other, the central part of the chamber seems to have had a barrel vaulting running north and south. It is thus restored in Mr. Doll's sections (figs. 50 and 51).

A sketch[1] showing a general view of the interior of the tomb when opened is given in fig. 52.

[1] By Monsieur E. Gilliéron.

The true floor of the chamber is a comparatively restricted space, about two and a quarter metres broad, by, at most, twice that depth. Along the left side of this, and in the back recess, ran a stone bench from 92 cm. to 1·20 wide, and 60 cm. high. On the right side this was reduced to little more than a ledge, of the same height but only about 20 cm. wide.

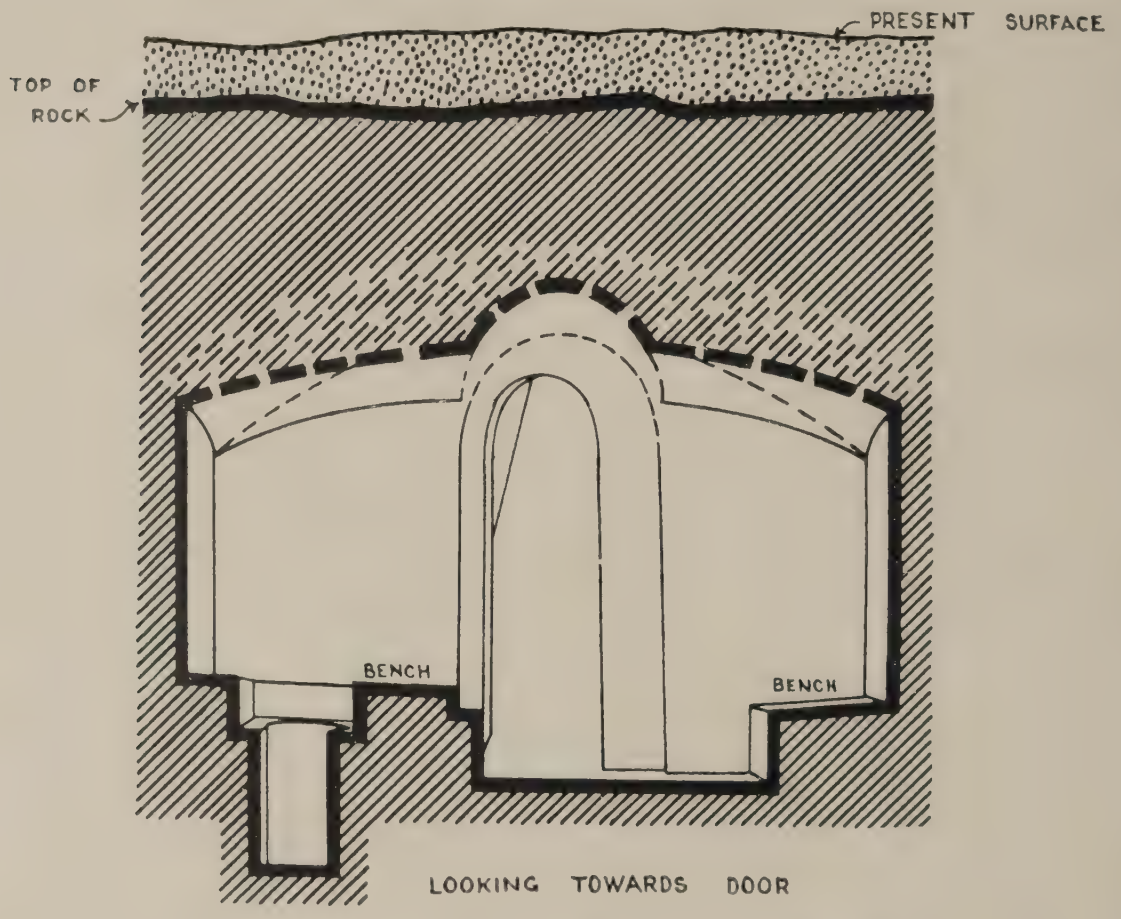


Fig. 50. Section A. A. of Tomb of Double Axes, looking towards door.

There can be little doubt that this arrangement with the triple bench and the central column was intended to represent the living room of a Minoan mansion—in all probability a room reserved for some specially religious purpose. It will be seen that this remarkable sepulchral plan suggests striking analogies with some Etruscan tombs.

On the right of this entrance area rises a rock-cut platform about 75 cm. above the floor-level, stepping up in the recess behind another 20 cm. In the centre of the lower of these platforms, immediately to the right of the entrance, had been sunk a rock-cut cist 1·20 m. deep—with a ledge at 33 cm. down, on which the slabs of its original stone covering had rested. These had been

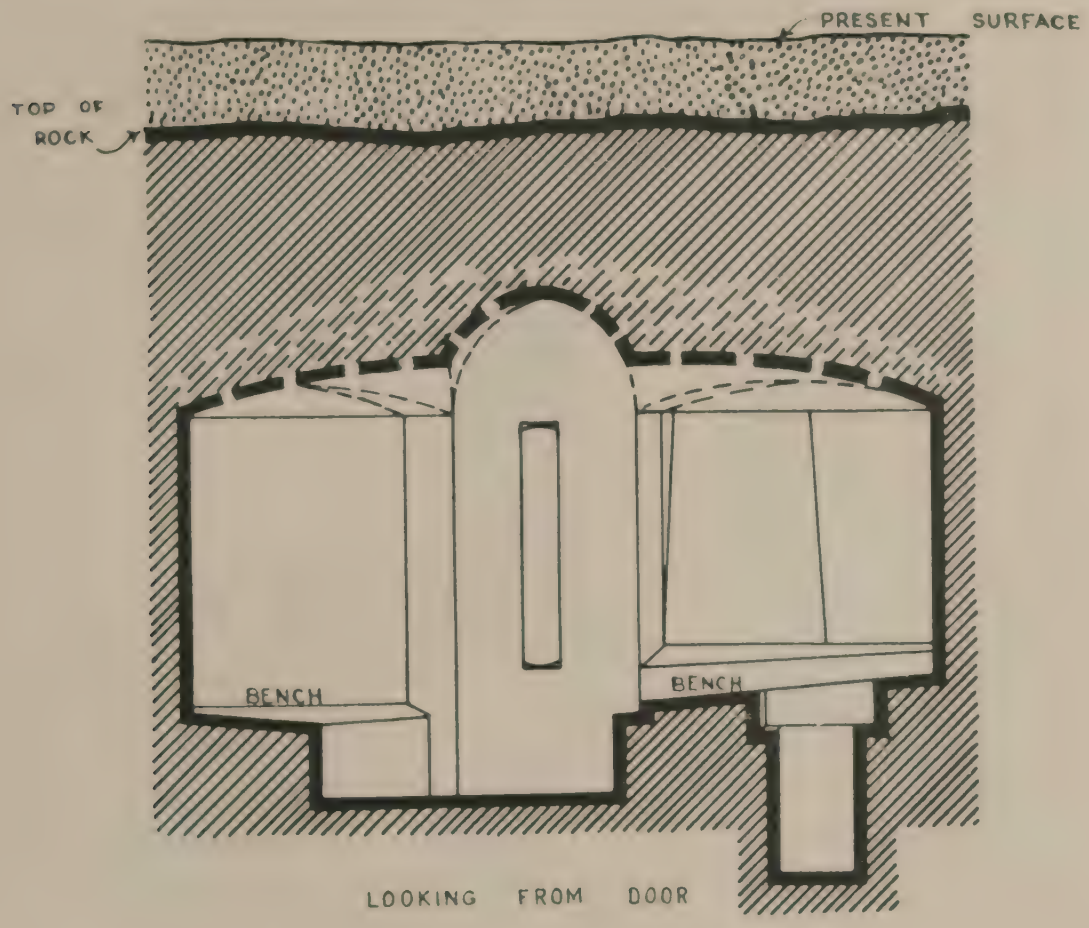


Fig. 51. Section B. B. of Tomb of Double Axes, looking towards pier.

removed and the cist itself completely rifled, even of its bones, at the time that the grave was plundered. Two gold beads alone remained as a record of the many precious objects that may have been originally laid with the body.

On the floor just beyond the edge of the platform were found two gold-plated studs of a sword, which also, in all probability, had once been placed beside

the dead within the cist. This may be taken as an indication that the personage who once here rested had a military rank.

It is probable that the other bronze implements and weapons, together with some small jewels, found on the same side of the floor-space as the gold-headed sword studs and near the edge of the upper platform, may also have been derived from the cist.

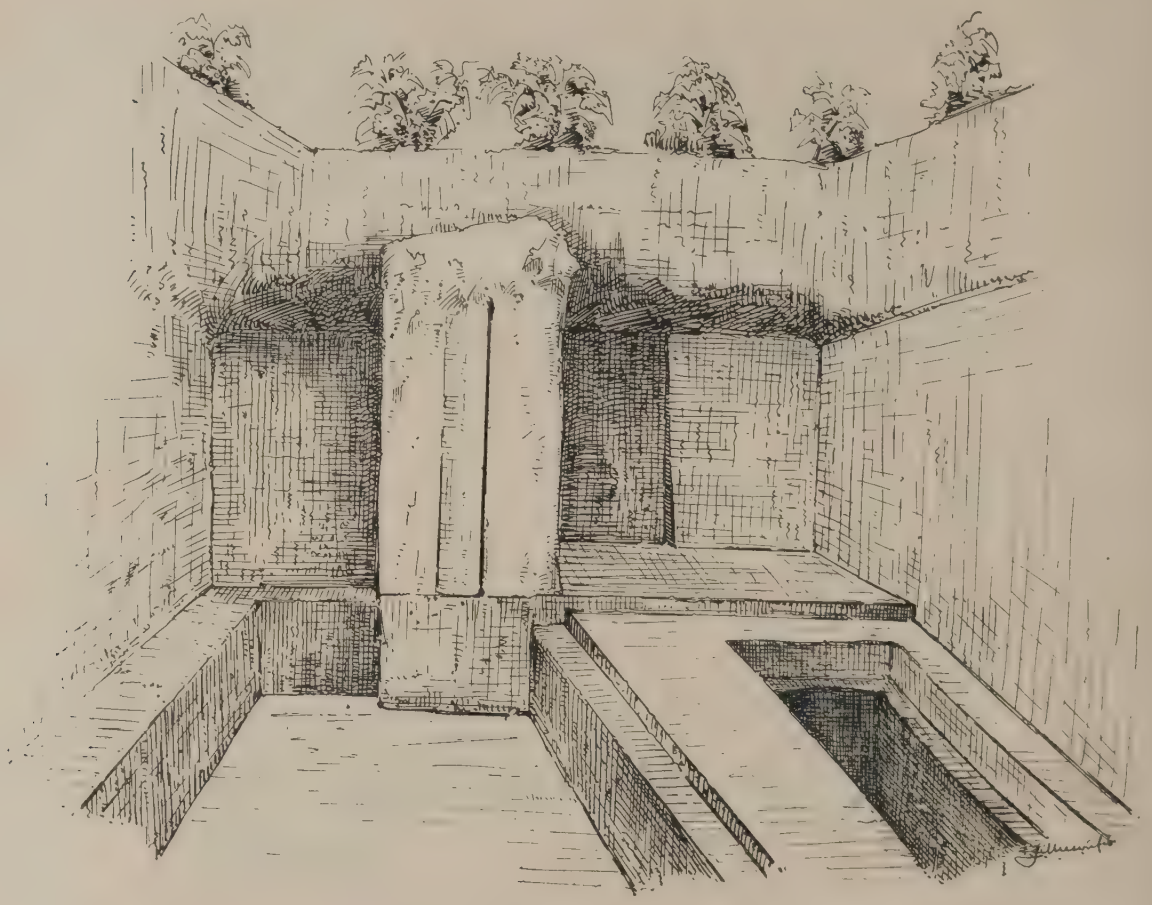


Fig. 52. View of interior of Tomb of Double Axes.

One of these was a thin leaf-shaped blade (2 *c*) of the same type as that from Tomb 3, except that its handle had been attached by three rivets. This type was well represented in the Zafer Papoura cemetery, and it may probably be regarded as an early form of razor.[1]

[1] See *Tombs of Knossos* (*Archaeologia*, 1906), p. 117, and cf. p. 51, fig. 50.

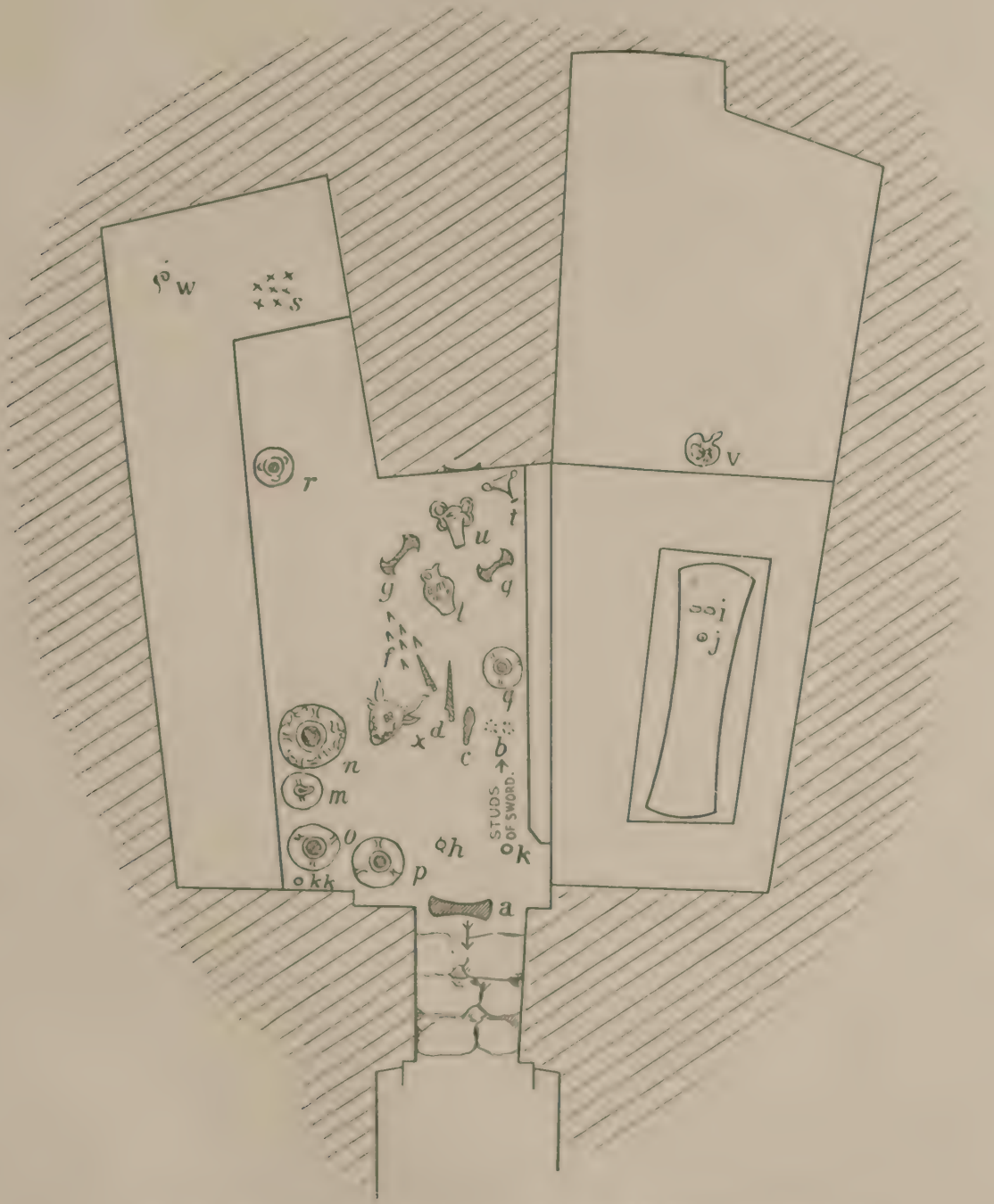


Fig. 53. Plan of Tomb of Double Axes, showing position in which relics were found

By this were two bronze knives (2 *d*, *e*), in both cases somewhat broken at the handle end (fig. 54). The larger of these was provided with gold-plated rivets; its original length must have been about 30 cm. Near these were also found about twenty barbed arrow-heads (2 *f*, fig. 54) of thin bronze plates, many of these fragmentary. They answer in shape to the stemless type found in the Hunter's

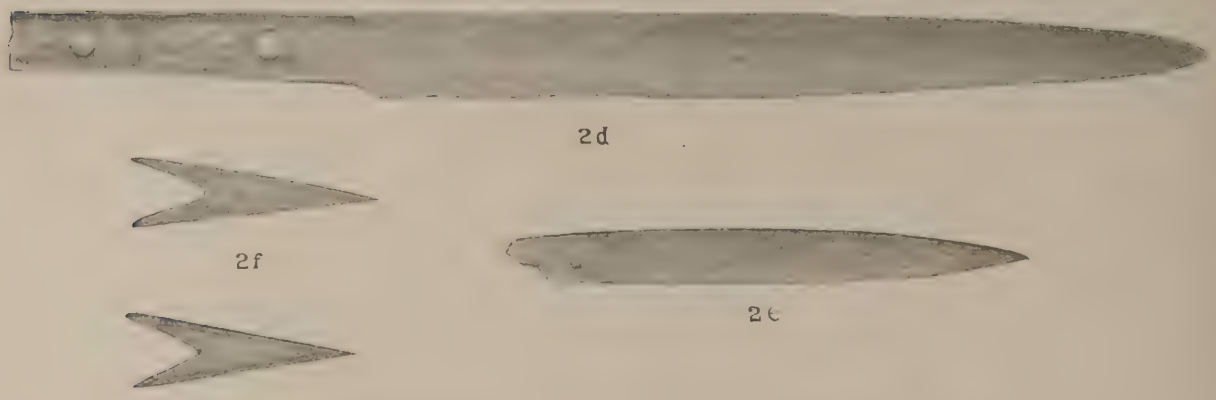


Fig. 54. Bronze knives and arrow heads from Tomb of the Double Axes. (⅔)

Grave at Zafer Papoura, and to a great hoard found in the 'Magazine of the Arsenal' at Knossos, but the dimensions in the present case were somewhat larger.

A little nearer the entrance was found a perforated lentoid gem of red cornelian (2 *h*) somewhat broken away on one side, presenting a lion and the

Fig. 55. Cornelian intaglio. (⅔)

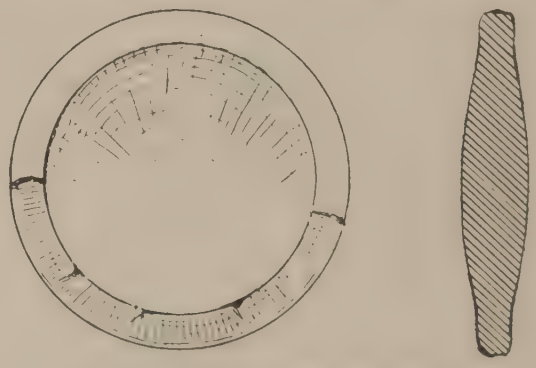


Fig. 56. Amber disc, cased with gold. (⅔)

hindquarters and part of the back of another maned animal somewhat broken away (fig. 55). By it was an amber disc (2 *j*) a good deal disintegrated, together with part of the gold casing that had surrounded its border (fig. 56). Somewhat removed from this, near the corner to the left of the entrance, were two flat beads of amber (2 *j*, *jj*), also a good deal decayed, with perforated centres (fig. 57).

Fragments of one of the beads were kindly analysed for me by Professor Otto Olshausen of Berlin, who has made the study of the Northern amber his speciality. Although, owing to some defect in the coal employed, it was not possible for him to make the analysis as complete as he had desired, the results were practically conclusive. That the material was 'succinite' or true amber was shown in his opinion '(1) by its appearance, which absolutely corresponded with that of much weathered succinite ("des stark verwitterten Succinit"); (2) by the development of sulphuretted hydrogen during distillation; (3) by the very strong acid reaction of the finally resulting distillation'. Owing to the difficulty occasioned by the above-mentioned defect in the coal, he was not, however, able to weigh the amber acid in a crystalline form.

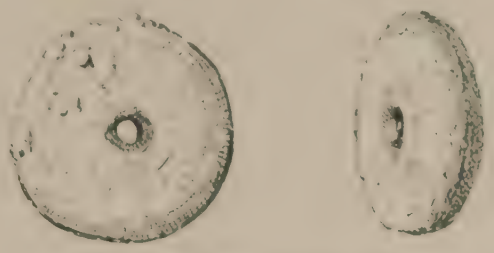


Fig. 57. Flat amber bead. (⅔)

It appears, therefore, that the material of the beads and jewel was amber of the Baltic class; and we may hence infer that the route by which this material reached the Aegean shore was still open at the time when the present tomb was closed, which, as will be shown below, corresponds with the Second Late Minoan Period and the last age of the Palace of Knossos. The amber beads found in the Shaft Graves at Mycenae, belonging to the immediately preceding First Late Minoan Period, were shown by Dr. Helm, of Danzig, to be also of the same composition as the Northern amber, containing six per cent. of succinic acid — and this characteristic ingredient is wholly wanting in the Sicilian and Upper Italian amber.

The repeated occurrence of amber in this Knossian tomb[2]—as in the slightly earlier Mycenaean Graves—is rendered the more interesting from the fact that no trace of this material occurred in the somewhat later cemetery of Zafer Papoura belonging to the beginning of the Third Late Minoan Period. We may perhaps infer that the catastrophe that overwhelmed the great Palace also

[1] Schuchardt, *Schliemann's Excavations* (Seller's transl.), p. 196.

[2] A further proof of the diffusion of amber at this time in Crete is afforded by a discovery that came under my notice some years since. In 1894 I obtained part of a bronze sword-blade, cornelian beads, and other small relics belonging to the early part of the Late Minoan Age (L. M. I or II), found, together with an amber bead, in a grave near Arvi, on the south-east coast of Crete.

brought with it some interruption of the sea-route by which the Northern amber had made its way to Minoan Crete.

The discovery by Dr. Xanthudides, in 1906, of two resinous fragments in a primitive 'tholos' tomb at Kumasa, has led Professor Mosso to draw the conclusion that amber was known to Minoan Crete at a considerably earlier epoch.[1] The tomb, in fact, belonged to the close of the Early Minoan Age, or the very beginning of the succeeding First Middle Minoan Period, according to my classification. Unfortunately, however, the evidence is by no means clear. The fragments were sent to Professor Mosso, who contented himself with burning the smaller piece on a platinum spatula over a gas-jet. 'It melted into a drop which looked like oil and boiled; it gave out an odorous smoke, and disappeared without leaving any trace of ashes.'[2] This, it will be seen, falls very far short of scientific analysis, and the behaviour of the burnt fragment was only such as might have repeated itself in the case of a piece of simple resin, such as those found in Tomb 1 of the present group. The now ascertained fact that lumps of resin were placed in the braziers of Late Minoan tombs, perhaps for purificatory rites, makes it possible that we have to deal with some similar rites in the case of the earlier 'tholos'. The description given of the fragments as 'of orange yellow colour with a slightly granulated surface', corresponds with the appearance of the resinous lumps of Tomb 1.

The most probable route by which amber of the Northern class could have reached the Aegean shores in prehistoric times must be still sought along the eastern Adriatic coast, the fiords and islands of which must have singularly favoured primitive navigation. It must at the same time be borne in mind that the recent discoveries in the Middle Valley of the Dniepr[3] of rich deposits of

[1] A. Mosso, *Le Origini della Civiltà mediterranea*, p. 200.

[2] 'Si fuse in una goccia che sembrava olio, e bolliva; mandò un fumo odoroso, e disparve senza lasciare alcuna traccia di cenere.' He adds, 'l'ambra fonde a 287°, ed, essendo fatta di ossigeno, idrogeno e carbonio, brucia completamente senza lasciare alcun residuo. Si è certi, che era ambra.' It is to be noted that Professor Mosso fails to say at what temperature the fragment burnt by him began to melt, but makes in place of this a general statement about the melting-point of amber.

[3] Principally in the environs of Kiev, between Mežigorie and Tripolje. It lies in Tertiary beds amidst greyish-yellow or white sands. Professor V. Chvojka of Kiev, to whose kindness this information is due (obligingly supplied to me through Mr. Ellis H. Minns of Cambridge), adds that the peasants find it in the beds of dried-up ponds and lakes or washed out by the rain in hollows, or, again, catch pieces in their nets when fishing in pools. They take it in to Kiev for sale when thus discovered; after dry seasons, in considerable quantities. Professor Chvojka adds, 'That in the Grand-Ducal Period (i. e. before the Mongol invasion) amber was an export of Kiev is known from historical sources; besides, it is found here in abundance in Slavonic town-sites (*Gorodišča*) as well as in burials, not only of the Slavonic but of the Scythic period, in the form of beads, pendants, etc., and in unwrought pieces. Since the dwellers on the Middle Dniepr had a very lively intercourse with the Greek Colonies of the Euxine —witness the Greek objects found in this region—it is almost certain that even in those days amber

amber of the same composition as the Baltic and North Sea class has now supplied a possible alternative route. Intermediate links connecting the Middle Dniepr with the Aegean in prehistoric times are as yet wanting, though there is every probability that the later Greek colonists of the Scythian coasts, like the Scyths themselves, obtained amber from this quarter.

In the grave cist itself—the only relics *in situ* of the personal ornaments of the dead—lay a perforated wooden disc (2 *f*, fig. 58) that must have served as the core of a gold-plated bead resembling those of amber, and two golden beads of a necklace (fig. 59). These present a well-known Minoan bead-type in the

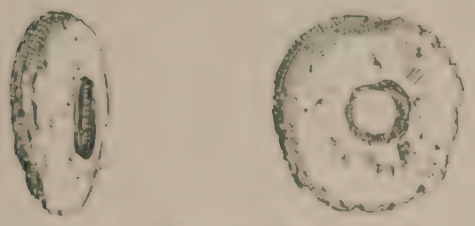


Fig. 58. Perforated wooden disc. (½)

Fig. 59. Gold bead in form of double argonaut. (½)

shape of an embossed design suggestive of an octopus, but really derived from a pair of argonauts (*Argo argonauta*). In style the beads here found resembled those from the 'Chieftain's Grave',[1] belonging to the last Palace period (L. M. II), an interesting corroboration of the approximate date of the present deposit. In another Zafer Papoura grave (no. 7) a series of similar beads, in a slightly inferior style, were found in position about the neck of the male skeleton,[2] showing that they were worn as a necklace or collar. The position in which the present beads were found, towards the further end of the cist, tallies with this supposition, and affords a presumption that the head of the interred personage was at that end.

The fine painted vases that adorned this tomb seem to have been placed on the floor of the chamber.

On the small back bench were found, together with the handle of a silver cup, fragments of a beaked ewer resembling in form fig. 60, below. Otherwise

was exported as a matter of regular trade.' Samples of the Kiev amber analysed by Professor Olshausen proved to be pure succinite like the Baltic amber, and contained from 6 to 6·20 per cent. of amber acid.

[1] *Prehistoric Tombs of Knossos*, p. 58, fig. 60, and cf. pp. 130, 131.

[2] *Ibid.*, pp. 25, 26. In the case of the 'Chieftain' the beads lay actually over the middle of the face, the necklace having shifted from below.

the vessels or their broken remains were ranged around the floor space in front of the benches. A fine specimen of a one-handled spouted vessel (2 *l*, fig. 60) exhibits a waved striated pattern of great interest in relation to the style of vase painting prevalent during the concluding period of the Palace at Knossos, to which the term 'Palace Style' has been applied. This style is in its essence architectonic, and represents the taking over into the ceramic field of decorative motives borrowed from the Palace walls—a process which shows a feeling for artistic unity characteristic of a highly civilized age. In the present case the

Fig. 60. Beaked jug with waved ornament.

Fig. 61. Fresco band, imitating waved marble, Knossos.

architectural indebtedness is exceptionally well marked, since the striated compartments seen on this vase, and repeated on a painted amphora from the same tomb (fig. 63), reproduce a recurring motive of the decorative bands of painted stucco seen beneath designs belonging to the last Palace period at Knossos. An example of such, showing above it the foot of a bull, is given in fig. 61. It is taken from the antechamber of the Room of the Throne, which owes its construction to this Period, and the interest of this comparison lies in the fact that the stucco decoration itself represents an attempt to imitate the veined marble plinth of an earlier age. The origin of the motive lies thus in stonework, and it made its way to the vases indirectly through the counterfeit in painted stucco.

The influence of painted stucco decoration is again very visible in the case of another ewer (*m*) found near the left bench of the chamber (fig. 62). This has a more globular body than the preceding and three handles to its neck. The large rosettes seen on the side, and the smaller contained in the spirals of the sprays that rise in the intervening fields, are exact reproductions of some of the most constantly recurring features in the fresco decoration of the early part of the Late Minoan Age.

With the ewer (*m*) were a fine group of three-handled amphoras, three of which it was possible to reconstitute almost in their entirety. The largest of these (2 *n*, fig. 63) presents a variety of octopus known as *Haledon*, with ten tentacles, symmetrically arranged in conformity with the purely decorative spirit of the contemporary art, and contrasting thus with the naturalistic versions of such marine forms that characterize the earlier Late Minoan phase. Beneath the handles are triple sprays of seaweed. The lower part of the body of this vase repeats the same architectonic pattern as the ewer (fig. 60). The decoration of its upper margin closely corresponds with that of the other ewer (2 *m*, fig. 62).

Fig. 62. Globular three-handled ewer (2 *m*).

Near this was another smaller 'amphora' of very elegant form (2 *o*, fig. 64), with vertical sprays of fern-like aspect, the direction of the leaves being arranged alternately upwards and downwards. Round its shoulder is a chain of conventional flowers. Another 'amphora' of this group (2 *p*, fig. 65) shows a cordiform pattern with rosettes, a design very characteristic of the 'Palace Style'.

A fourth 'amphora' (2 *q*, fig. 66, *a*, *b*), which had been set against the base of the ledge on the right, afforded some fine examples of the conventional 'lily' sprays of the Palace Style. Remains of several large jars presenting similar sprays were found among the débris of a large hall above the Palace Magazines, near its north-west angle, and must have stood on its floor at the moment of its destruction. It is to be observed that in this and other cases the amphora, like Greek painted vases of later date, has two distinct faces, of which *a* is carefully designed, while the other, *b*, presents an inferior and imperfectly finished design.

Fig. 63. Three-handled 'amphora' (2 *n*).

The contrast is interesting as showing the coexistence of purer and more degraded versions of the same decorative motives. The larger vases were evidently intended to be placed against the walls of chambers so that only one side would be visible. This disposition is indeed indicated by the places in which the remains of these amphoras were found in the present tomb.

Fig. 64. Amphora with fern ornament (2/9).

Fig. 65. Amphora with rosettes,

a

Fig. 66, *a*. Front side of 'amphora' (2 *q*).

b

Fig. 66, *b*. Back side of 'amphora' (2 *q*).

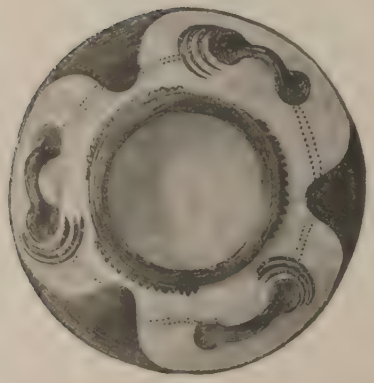


Fig. 67, *a*.

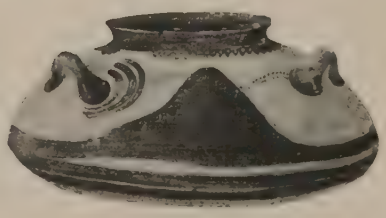


Fig. 67, *b*.

Fig. 67, *c*.

Fig. 67. Clay 'alabastron'. (½)

On the inner right-hand corner of the floor was a flat clay 'alabastron' (2 *r*, fig. 67) of the usual class, with plain undulating and beaded decoration. Near the opposite corner was a plain pedestalled cup (2 *t*, fig. 68), with two handles of a form derived from a class of similar goblets in precious metals, of which examples were found in the Shaft Graves of Mycenae. Clay cups of this type become commoner in the succeeding Third Late Minoan Age.

The whole series of painted vases found in this tomb forms a very homogeneous group, and they were obviously in several cases the work of the same hands. Certain typical motives, such as the waved pattern, that appears on 2 *l*

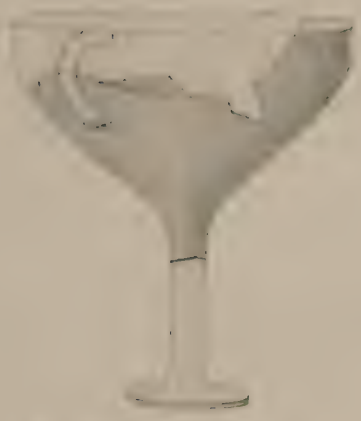


Fig. 68. Plain clay goblet. (⅓)

Fig. 69. Ritual vessel. (⅓)

and 2 *n*, the shoulder ornament of 2 *m* and 2 *n*, and a variety of decorative spray common to 2 *m* and 2 *n*, link on one with another. So many, indeed, are the points of conformity, that they may well be described as belonging to the same 'set'. The style is uniform and answers to that of the concluding age of the Palace of Knossos, in other words, the second Late Minoan Period. It is the 'Palace Style' in its most fully developed phase.

In the angle of the floor area immediately in front of the column in relief were found some relics of exceptional interest. In this space, in a broken condition, lay the remains of a vessel[1] which, from its doubly coiled handles, and in

[1] During some early disturbance of the tomb a fragment of this vessel had been separated from the rest and was found just inside the doorway.

its general outline, excepting its dome-shaped top, recalled the polychrome goblets of Tomb 5, and was evidently, like those, of a ritual character (2 *a*, fig. 69).

This last-mentioned analogy makes it highly probable that in this case, too, the walls of the vessel were covered with Egyptian blue and brilliant red colours of an imperfectly fixed nature. These, however, had in this case been entirely obliterated.

Fig. 70. Restoration of steatite, etc. 'rhyton'. (*c.* ½)

The essential difference between this vessel and the polychrome vases described above (see fig. 37, *a*, *b*, and pl. IV) was that in this case the top part is closed with a breast-shaped cover, in the top of which is a circular aperture.

This vessel has some analogy with the pedestalled vases found at Phylakopi in Melos, in the Pillar Chamber west of that containing the flying-fish fresco,[1] and which seems to have been used for purposes of cult. In the case of these

[1] D. G. Hogarth, *Phylakopi*, p. 18.

vases the upper margin expands into a kind of bowl, surrounding a convex protuberance with a central hole [1]—the whole upper surface being at times covered with a coloured design showing petals radiating from the low dotted boss in such a way as to resemble a sunflower. These sunflower vases differed from the present example in being handleless, and in having a hole in the bottom of the recipient for the percolation of fluid contents.

Other analogies are supplied by an allied class of painted vessels found with a mass of L. M. I pottery in a Minoan well on the hill of Gypsades, south of the Palace at Knossos, excavated by me in 1913, though in this case, too, the characteristic handles were wanting.

It seems probable that the vessel shown in fig. 69 was used for holding libations, carefully poured by means of a Minoan 'rhyton' into the small round opening at the top. A ritual function of this class was indeed directly indicated by the fact that not far from the remains of this vessel were found parts of a steatite rhyton of a well-known class, in form of a bull's head (fig. 70). The only perfect portions of this were the ears and the inlays for the cheeks and forehead in the form of quatrefoil plaques of a kind of hard schist. The fine bull's-head rhyton of inlaid steatite from a shrine of the Little Palace at Knossos, to be described below,[2] though on a slightly larger scale than this, makes it possible to complete the restoration of the present example as seen in fig. 70. 'Rhytons' of this class show a large round aperture on the top of the head, into which the libation fluid was poured, while it found egress through a small hole in the lips. There is every reason for believing that the rhyton before us had served as an intermediary for pouring libations into the pedestal vase described above.

The religious character of these vessels received a striking corroboration from a further discovery made in close association with their remains. Together with these, on the right-hand inner angle of the floor area, there came to light two bronze double axes of the votive kind (2 *g*, *g*, fig. 71). One of these axes was fragmentary, but the dimensions of what remained of it answered to those of the perfect specimen, which was of bronze plate, 18·8 cm. in breadth, and with remains of its wooden shaft still preserved in its central socket.

We have here therefore to do with one of the usual pairs of votive double axes which formed the cult objects in Cretan sanctuaries. The shafts of these were either socketed into the sacral horns of stucco or other materials, of such constant recurrence in the Minoan holy places, or were set into stepped pyramidal pedestals. Of the first practice we have a certain example in the late Palace

[1] C. C. Edgar, *Phylakopi*, pp. 137, 138, and fig. 110.
[2] See p. 79 seqq., below.

shrine of Knossos, where the 'Horns of Consecration' with perforations for the axe-shafts were still in place. The painted sarcophagus of Hagia Triada, on the other hand, actually illustrates a scene of offering before two large double axes set in stepped pedestals showing veined imitations of marble. Steatite pedestals of this kind were found, together with many specimens of the votive blades themselves, in the Cave of Psychro (see p. 72, fig. 82), and a fragment of

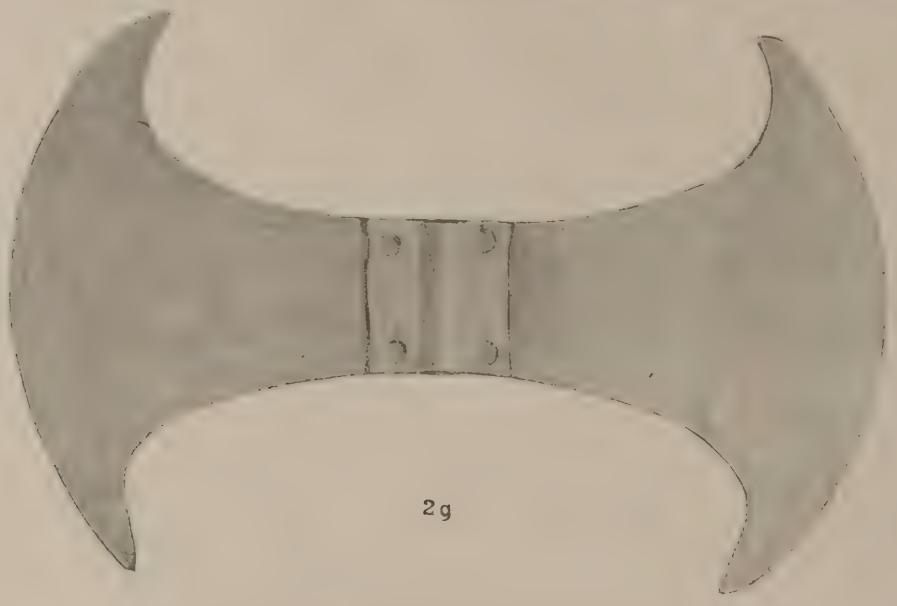


Fig. 71. Sacral bronze double axe. ($\frac{2}{3}$)

another from a shrine of the Little Palace of Knossos will be described below.[1]

As in the parallel case of the sacred pillars and columns of Minoan cult—or of the objects of natural formation such as the curious limestone concretions of the shrine in the 'Little Palace'—these Double Axes were regarded as fetish or baetylic representatives of divinities, the divine possession of which could be attained by special rites. The divine presence is itself indicated in the case of the columns and altar horns by a settled dove—also at times associated with the figure of the great Minoan Goddess itself. In the cult scene of the Hagia Triada sarcophagus the same idea is expressed by the bird alighted on each of the Double Axes, perhaps the sacred woodpecker,[2] afterwards identified with the Cretan Zeus. On the other hand, the chthonic side of the worship makes itself apparent in the serpents with which certain cult images were associated, and

[1] See below, p. 72.

[2] This suggestion was made by me at the Oxford Meeting of the Oriental Congress.

that encircle the 'Snake Goddess' of the Temple Repository of Knossos. There can be little doubt that these and other attributes are for the most part connected with varying aspects of the great Nature Goddess of Minoan Crete, who in later tradition was identified, as the case might be, with Rhea, Artemis Diktynna, or Aphrodite Ariadne. With her, as in the parallel Anatolian religions, was grouped a male satellite, who in the hellenized cult of Crete came into greater prominence as the indigenous Zeus.

A series of examples of Minoan shrines—some, like that of the Re-occupation Period in the Palace at Knossos and the 'Shrine of the Fetishes' in the 'Little Palace', practically undisturbed—show that the regular arrangement was to set out cult objects on a ledge or bench at the further end of the chamber. It certainly looks as if in the present case the rock-cut ledge in front of the recess immediately beyond the inner border of the sepulchral cist had been designed for this purpose. The position in which the ritual double axes and the remains of the libation vessels lay in the adjoining corner of the floor area agrees very well with the supposition that they had been swept off the neighbouring ledge at the time when the tomb was plundered. Moreover, there was found on the ledge itself the handle part of a chafing-dish or censer of the same form as those from Tomb 1 (cf. fig. 18, above), which may well itself have been placed beside the cult objects. Like the others, it had in all probability served for the ritual fumigation of the chamber.

It is probable that, as seems to have been more usually the case in domestic shrines, the shafts of the double axes were in this case socketed in 'sacral horns' of plaster with a clay core. The destruction of such is easily accounted for by the disturbance due to the plundering of the tomb or the falling in of parts of the ceiling of the chamber.

The appearance here among the funereal furniture of these ritual double axes in association with libation vessels is thus a phenomenon of the highest interest. It marks the sepulchral chamber as a sanctuary of the Minoan Goddess, as well as a tomb. On the sarcophagus of Hagia Triada we see, side by side with the offering of libations before the sacred Double Axes, another offertory group directed towards what appears to be a representation of the deceased himself, standing at the door of a small building which may perhaps be described as a *heroön*. The cult of the dead is thus brought into direct relation with the divinity or divinities of the Double Axes, and we may infer that in the present tomb the mortal remains had been placed in some ceremonial manner under divine guardianship.

But in this case the connexion of the sacred symbol with the sepulchral religion did not end here. Mr. Doll's minute measurements of the rock-cut cist itself (fig. 72) brought out a still more surprising phenomenon, which is also

clearly visible in the photographic illustration, fig. 73. It will be seen that the walls of the cist are in each case slightly but regularly curved, the longer sides inwards, the two ends outwards, in such a manner that the whole outline of the sepulchral cell is made to resemble the form of a double axe. The bronze axe (fig. 48, above) of the ordinary working type, found in the blocking of the doorway, shows a similar shape.

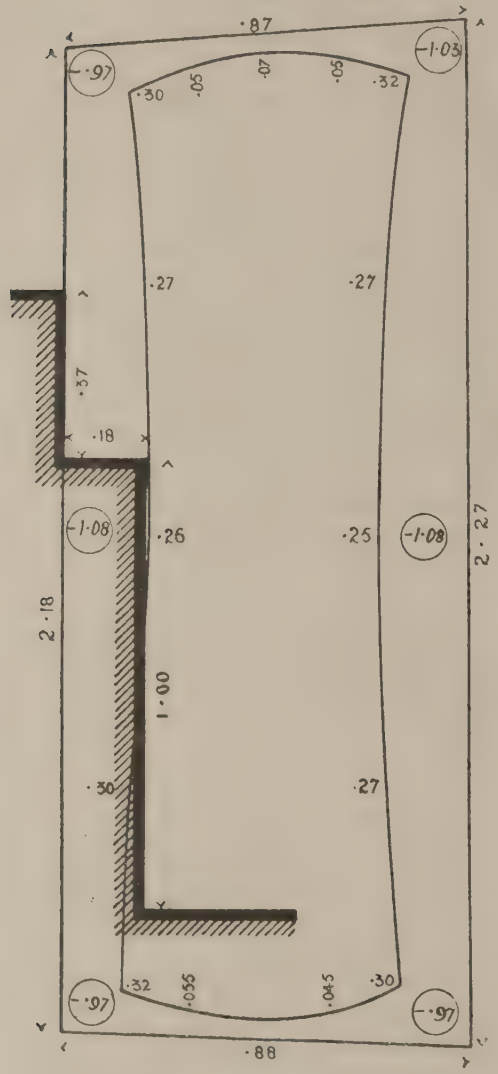


Fig. 72. Plan and section of cist in Tomb of Double Axes.

Religious symbolism could hardly go further than this shaping of the sepulchral cell itself into the outline of the sacred object. With the small shrine of the Double Axes near the head of the grave, the tomb was at the same time a funereal chapel, and it may well be that the benches round the sides of the chamber were made use of for some memorial function in which the whole family partook. On such an occasion, in accordance with the central idea of the Minoan cult, the essence of the divinity might by due ritual acts be infused into its visible symbols, and, even in the shades, the direct guardianship of the Great Mother be thus assured to the warrior resting in his emblematic bed.

May some such memorial service have been renewed after an interval of time? The evidence, to which attention has been called above, of the deliberate re-opening and re-closing of the tomb at a subsequent date is consistent with this possibility. The relics themselves, moreover, are of a homogeneous and strictly contemporary character, which forbids the assumption that this re-opening was for the purposes of a second interment. The painted vases belong to the same 'set'. They are the clearly marked products of a definite stage of the second Late Minoan Period, and are characteristic of the epoch preceding the great catastrophe of the Palace at Knossos.

Fig. 73. View of slot, showing angle of [illegible]

The approximate positions[1] in which the objects found in this tomb lay are shown in the key-plan (fig. 53).

Contents of 'Tomb of the Double Axes' (T. 2).

2 *a*. Bronze double axe. Length, 20·3 cm. (fig. 48).
2 *b*. Gold-plated studs of sword. Diam. 1·2 and 1·5 cm.
2 *c*. Bronze 'razor' with leaf-shaped blade. Length, 23·2 cm.; greatest width, 6·2 cm.
2 *d*. Bronze knife with gold-plated studs; small piece of handle wanting. Length, 25·8 cm. (original length, *c*. 28 cm.) (fig. 54).
2 *e*. Small bronze knife: broken. Blade 11 cm. long (fig. 54).
2 *f*. Remains of about 20 arrow-heads with barbs. Length, 4·9 to 5·2 cm. (fig. 54).
2 *g*, *g*. Bronze ritual double axe, and parts of another. Length of blade, 18·8 cm.; width of wings, 11 cm. (fig. 71).
2 *h*. Cornelian lentoid gem, showing lion and hindquarters of a maned animal in front (fig. 55).
2 *i*. Gold beads in form of double argonaut, with three perforations (fig. 59).
2 *j*. Wooden core of bead (fig. 58).
2 *k*. Amber disc in circular gold casing (fig. 56).
2 *k*, *k*. Amber bead (fig. 57).
2 *l*. One-handled ewer with raised spout, and waved decoration (see p. 46). Height, 35 cm. (fig. 60).
2 *m*. Three-handled ewer of more globular form with raised spout, decorated with large rosettes. The coil ornament round its neck resembles a similar feature on *n*. Height, 30·75 cm. (fig. 62).
2 *n*. Large three-handled 'amphora', with design of Haledon octopus and sprays of seaweed. Below this, waved decoration as *l*. Height, 72 cm.; diam. 52 cm. (fig. 63).
2 *o*. Three-handled amphora, with vertical bands of foliage on its body alternately arranged with the leaves upwards and downwards. Height, 42 cm. (fig. 64).
2 *p*. Three-handled amphora, showing cordiform design with rosettes of 'Palace Style' and foliated border round the spring of the neck. Height, 44 cm. (fig. 65).
2 *q*. Three-handled amphora, with decorative lily designs of 'Palace Style'. The design on one side is much more summary and altogether inferior to that on the other, showing that the vase was intended to be placed against a wall. Height, 26·5 cm. (fig. 66, *a*, *b*).
2 *r*. Clay 'alabastron', with undulating lower border. Diam. 16·50 cm. (fig. 67, *a*, *b*, *c*).
2 *s*. Fragments of vase like *l*.
2 *t*. Plain pedestalled cup with two handles. Width of rim, 15·3 cm.; height, about 16 cm. (fig. 68).

[1] In the case (s) of broken objects, the fragments of which were somewhat scattered, the position given is that occupied by the principal portion.

2 *u*. Ritual vessel, with breast-shaped top and curling double handles, resembling those of the polychrome vases from Tomb 5 (see above, p. 27, fig. 37, *a*, *b*, and pl. IV). The apex of the vessel shows a small round orifice, as if for the reception of libations poured from a rhyton. This vase may originally have had polychrome decoration, but it was found in a very fragmentary state, and the surface was too worn to preserve any traces of the original colouring. Height, 27 cm. (fig. 69).

2 *v*. Handle and part of the pan of clay brazier or chafing-dish. (Cf. fig. 18 above.)

2 *w*. Handle of silver goblet.

2 *x*. Ears and inlays, &c., of steatite 'rhyton' in form of a bull's head. The inlays of the forehead and cheeks were of a quatrefoil form, and consisted of a hard purple schist. (Restoration, fig. 70.)

2 *y*. Hone; found outside the blocking of the entrance.

PART II

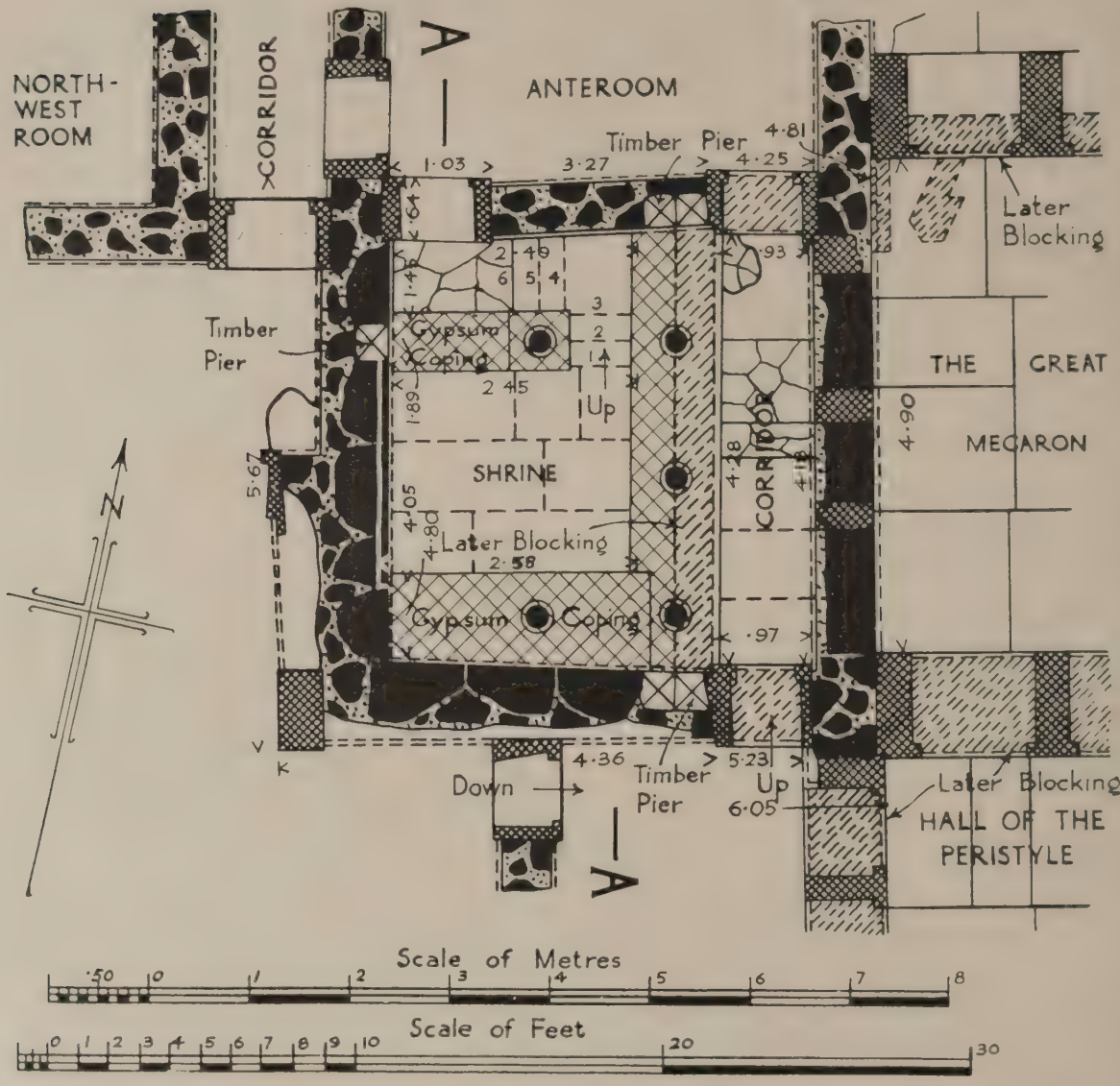
§ 1. *The Pillar Rooms and Ritual Vessels of the 'Little Palace' at Knossos.*

The large house opened out in the hill-side west of the Palace at Knossos was proved to be of such extent as to earn for it the name of 'the Little Palace'[1]. It must evidently have been the residence of some important personage. A direct relationship, moreover, between the larger and smaller building is indicated by the very circumstances of the discovery of this lesser Palace. This was due to the following up westwards of the Minoan Paved Way from the point where it abuts on the 'Theatral Area'—the small paved court backed by flights of steps, which seems to have been the scene of ceremonial receptions.

The 'Little Palace', the foundation of which dates apparently from the beginning of the Late Minoan Age, not only reproduces many of the later architectural features of the greater Palace, but shares with it one marked functional characteristic. The larger building, as its remains declare, was as much a sanctuary as a residence, and may well have been the abode of a long dynasty of priest-kings. So, too, in the 'Little Palace' numerous indications, the purport of which will be described below, point to the conclusion that the building was largely devoted to the purposes of cult. The tradition of this, indeed, survived to the time—following on a great catastrophe, in which both buildings shared—when it was re-inhabited and parcelled out among smaller occupiers.

Already in the year 1905 there had come to light in the north-east quarter of the 'Little Palace', behind the large 'Megaron', an area closed in and converted into a shrine of a very primitive character in the last Minoan Age, but which had

[1] See A. J. E., *Knossos, Report*, 1905, p. 2 seqq. (*B. School Annual*, xi).



Mens et Delt.
Christian C. T. Doll.

Fig. 74. Plan of Room of the Sunken Area (later, Shrine of Fetishes), Little Palace, Knossos.

probably from its first construction served some sacral purpose. The area in question (see plan, fig. 74[1]) is in fact one of a typical class, at present known to have existed in a series of Minoan buildings. It consists of a sunken rectangular

[1] The present plan—an improvement on the provisional sketch given in *Knossos, Report*, 1905, p. 9 (*B. S. A.* xii)—was executed for me by the architect Mr. Christian C. T. Doll, to whom the plans and sections of the 'Little Palace' are due.

space flanked by balustrades and approached by descending steps. The enclosed space, which seems to have been originally paved with gypsum slabs, cannot be regarded as a light-well, and its characteristic features, the sunken floor, the balustrade and steps, serve no apparent utilitarian ends. The use of the term 'bath room' in connexion with these spaces is hardly appropriate, as there is no trace in these areas of any inlet for water, nor even, as is universal in the ordinary Minoan light-wells, of any outlet. On the other hand, the sunken space of this kind adjoining the 'Room of the Throne' in the Palace itself stands in an obviously sacral connexion, and it is probable that the later occupants of the 'Little Palace', who converted the similar area there into a closed shrine, were

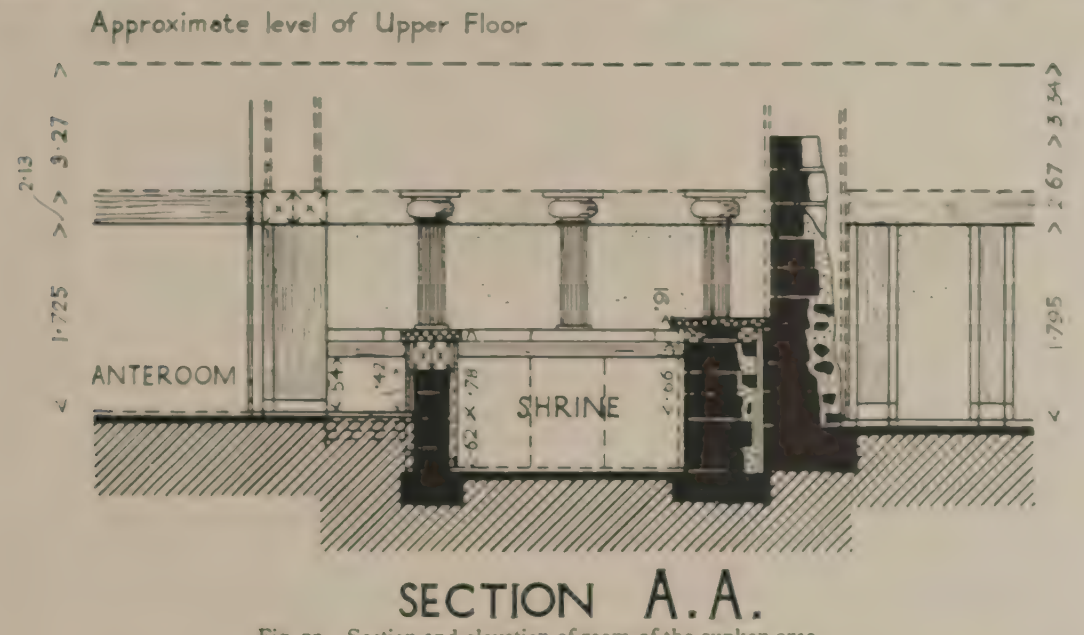


Fig. 75. Section and elevation of room of the sunken area.

only readapting in their primitive fashion what had already been set apart for some allied religious usage. The openings between the still existing wooden columns were now deliberately blocked, while the back ledge of the balustrade was used for fetish images consisting of grotesque natural concretions. These were set beside the traditional sacral horns of plaster together with a rude votive figure of an Agrimi or Cretan wild goat in painted clay, and parts of others.

There were also found within the sunken area, or on its borders, certain earlier relics which may well have belonged to a sanctuary connected with the original building. Among these, indeed, were fragmentary sealings, one of which shows part of the façade of a pillar shrine, while another contained part of a group of confronted lions guarding a rocky base, such as that on which the Minoan Goddess—

here the forerunner of the later Rhea—stands between similar guardians on a series of seal-impressions from the central shrine of the great neighbouring Palace.

A section and elevation of this chamber looking east is given in fig. 75, which as well as the plan is the work of Mr. Christian Doll. The result of his careful investigations has been to show that while the original constructions

Fig. 76. View showing impressions of fluted columns on clay and rubble blocking.

here go back to the earliest period of the 'Little Palace', there is evidence of more than one subsequent modification. It is clear, for instance, that according to the original arrangement there were three openings between the small corridor that runs east of the sunken area and the great 'Megaron', so that it may have received a certain amount of light from the first section of this hall on that side. At some still flourishing period in the history of the building, however, these openings were blocked with good masonry. Finally, in the period of re-occu-

pation the interspaces between the wooden columns themselves were blocked with clay and rubble, so that the corridor itself, the entrances of which were also blocked, must have been reduced to a dark space.

A preliminary account of the 'Shrine of the Fetishes' and this balustraded area has been already given by me in my Report on the Excavations of the year 1905.[1] A very interesting feature, however, did not there receive illustration, the impressions, namely, left by the original wooden columns on the later plaster blocking of the balustrade on the east side. Two of these are

Fig. 77. Section of fluted column.

shown in the photograph reproduced in fig. 70. It will be seen from this that the fluting here is in relief, like that of the Egyptian columns imitating clustered papyrus stems, from which this architectural form was certainly taken over. From measurements of these flutings Mr. Doll has been able to establish the fact that these were fifteen in number and there seems to have been no downward taper of the columns. The section and restored plan is given in fig. 77.

The subsequent excavation of the southern section of the 'Little Palace' brought to light certain architectural features which in other cases have been shown to connect themselves with Minoan cult. These are the 'Pillar Rooms',

[1] *Brit. Sch. Annual*, xi, p. 6 seqq.

or basement chambers, the roof of which is supported by one or more square stone pillars. No less than three examples of such 'Pillar Rooms' occurred in this part of the building.

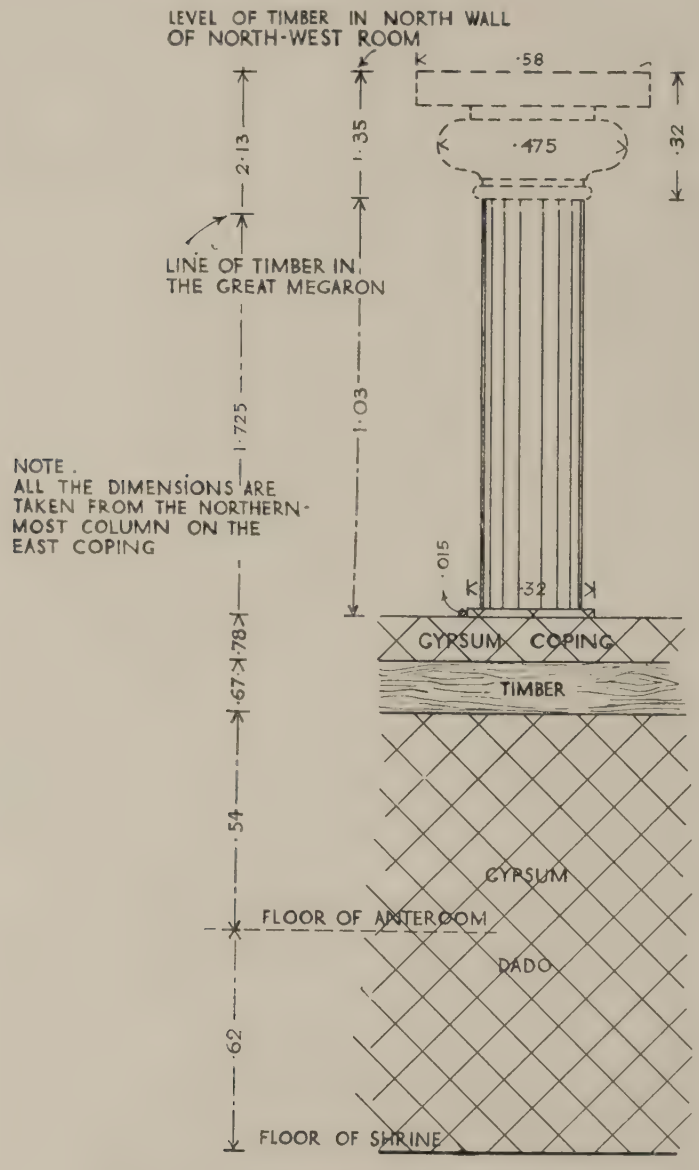


Fig. 78. Elevation showing balustrade and pillar.

At the south-east angle two narrow flights of stone stairs led down to a quadrangular construction on a lower level, but otherwise forming a continuation of a distinct eastern section of the building. This section includes in succession the large Megaron, the Peristyle, and the adjoining Hall of the Stepped Doorways (see plan, pl. VII).

The basement building was separated for over half its width from the upper terrace on which the rest of this eastern section rests by what seems to have been a light area giving light to the easternmost of the two compartments of which it was composed. The inner or western compartment contained two square pillars—that to the south, completely preserved, consisting of two limestone blocks on a square base,[1] which was the only part remaining of the other pillar. Between these pillars was let into the ground a kind of shallow stone cist or vat consisting of a square basin with a smaller sunken square in the middle (see fig. 79).

[1] The base was 80 cm. square, and 38 cm. high; the blocks 70 cm. square, and 92 cm. and 45 cm. high respectively.

Fig. 70. East and West Pillar Rooms of Little Palace, showing cornice at east end of west room.

This two-pillared crypt, the southern limits of which were restricted by a walled partition containing a small staircase, opened east on a similar chamber of somewhat larger extent, which had originally contained three pillars, of which, however, only the base of the central one and the sockets of another were preserved[1] (see fig. 79). In the interspaces between these were two square basins of the same shape as that in the first chamber. Light was, no doubt, obtained for this three-pillared crypt by means of the sunken area along its north face (see Plan, pl. VII).

The square basins set between the pillars of these basement chambers, with the smaller square sunk in their centre, could hardly have served any utilitarian purpose. Shallow stone vats of the same kind were found in a similar position in the Pillar-Rooms of the Palace and of the Royal Villa at Knossos, and their character and associations suggest that they were used for libations in connexion with the special cult attaching to these Minoan pillars.

The conclusion that the stone basins set beside the pillars fulfilled a ritual purpose is confirmed, moreover, by other parallel phenomena. In the west pillar-room at Phylakopi the place of these stone receptacles was taken by pedestal vases of the same class as that from the 'Tomb of the Double Axes'[2] — itself, in truth, a pillar-room—and evidently intended for libations. On the other hand, in a small chamber of this class excavated by Mr. Hogarth in a house on the hill of Gypsades, south of the Palace at Knossos, nearly 200 plain clay cups, of the class so plentifully associated with Minoan holy places, were found, arranged in regular rows on two sides of the central pillar,[3] covering in each case a little heap of carbonized matter which probably represented some form of fatty or oleaginous offerings.

The religious associations of such 'Pillar Rooms' are illustrated in other ways. The view originally put forward by me,[4] that the constant recurrence of the double-axe sign on the blocks of the pillars in the west quarter of the Palace at Knossos must be taken to indicate their special sanctity, has been borne out by the whole course of discovery in that region of the building. The pillar-rooms are indeed seen to form the nucleus of a sanctuary block in relation with a Central Palace shrine of which we have now the records both from its earlier and its later stage. In the small contiguous 'Room of the Stone Vases', moreover, were found a series of ritual vessels including marble 'rhytons' in the form of lionesses' heads.

[1] In the case of the south pillar the socket itself was obliterated, but the basin on this side as well as considerations of symmetry warrant the conclusion that it had originally existed.

[2] See above, p. 51, fig. 69.

[3] Hogarth, *B. S. A.*, vi, pp. 71, 76, and pl. vi.

[4] *Report, Knossos*, 1900 (*B. S. A.*, vi, p. 32 seqq.); *Mycenaean Tree and Pillar Cult*, pp. 12, 13 (*J. H. S.*, xxi, pp. 110, 111).

Fig. 80. Ethar Room of S.E. House, Knossos, showing socketed pedestal for double axe beside pillar with [illegible] sign.

The objects found in this room lay well above the floor-level, and had evidently made their way into the basement through the breaking in of the floor of an upper chamber. On the other hand, the two large column bases found above the floor-level in the contiguous area to the north of this had clearly been originally set on the floor of an important hall above the stone pillars of the adjacent basement rooms—the function of the pillars as supports of columns on the floors above being here illustrated by the fallen column-bases. As the ritual vessels had either stood in this columnar hall or in a room directly connected with it, we have thus direct evidence of its religious character. The pillar-rooms in this case certainly stood in relation to an upper sanctuary.

An interesting parallel, highly illuminating as to the cult connected with these pillars, was supplied by a small house dating from the last Middle Minoan Period excavated on the south-east borders of the Palace. Here, in a small chamber of fine ashlar masonry (fig. 80), was a central pillar, the upper block of which was exceptionally [1] marked with the double-axe sign. At the foot of the pillar on the north side, moreover, was a small limestone base of stepped pyramidal form, with a socket above, corresponding with the stands of the sacred Double Axes as seen on the Hagia Triada sarcophagus, of which other examples will be described below.[2]

The pillar cult is here clearly brought into connexion with the divinity of the Double Axes—the great Minoan Goddess. A probable sign of a religious dedication is also visible in the case of a single pillar in a room on the upper level of the fine Late Minoan house excavated outside the south-west Palace angle at Knossos. At its foot is placed a slab with three circular sockets which seem to have been intended for the insertion of cult objects.

That the 'Pillar Rooms' go back at least to the very beginning of the Age of Palaces is shown by the very early 'Basement of the Monolithic Pillars' on the east boundary of the Palace at Knossos. The large deposit of early polychrome pottery in this may have been due to ritual offerings, and the remarkable painted vessel in the form of a dove,[3] which came to light here on the original floor-level, has certainly a religious aspect.

In the case of many of the smaller pillar-rooms with a single pillar such as those of the South-East House and Royal Villa at Knossos, that of the house on the hill of Gypsades, and those in the two small rooms at Phylakopi — there is no obvious structural reason for such a central support. Yet it is probable that in all cases these stone pillars served a constructive purpose, and their presence, even in small chambers easily spanned by beams, is accounted for in the

[1] Signs were otherwise absent on the blocks of this room.

[2] See below, p. 72, fig. 82.

[3] See my forthcoming *Nine Minoan Periods*, p. 128 and fig. 97.

most natural manner by the assumption that they acted as supports of the wooden columns of a chamber above, as seems to have been certainly the case with pillars of the sanctuary quarter in the Knossian Palace. In that case, as already pointed out, the stone bases of the wooden columns that they had originally helped to support were found close by, above the level of the basement floor.

Of the sanctity of such wooden columns as 'Pillars of the House' there is abundant evidence among the representations on Minoan and Mycenaean works of art.[1] It was a cult largely shared by the Semitic world, as we see from 'Jakim and Boaz', the golden column of Hiram's temple, and the columnar impersonations of divinities on the Carthaginian *stelae*. These columns, even when not actually performing constructive functions, were made, like those before Solomon's temple, in a purely architectural form, with capitals as if for the support of an architrave; and the names attached to them in the latter case, 'the Stablisher' and 'In Him is my strength', sufficiently attest their religious intention.

In the Minoan and Mycenaean illustrations of such columns, frequent on engraved seals and gems, we see not only the indication of the architrave, but the round ends of the beams above—the column thus typifying the whole building. Before it appear adorant votaries, and it is guarded by sacred monsters, lions, sphinxes and griffins. The columns themselves were doubtless hewn from the trunks of sacred trees, like that of the temple of 'Isis' at Byblos, derived from the divine tamarisk said to have grown about the Chest of Osiris.[2]

We have therefore to regard the 'Pillar Rooms' of these Minoan basements as, in many cases at least, the crypts beneath upper rooms and halls whose columns were associated with a more open cult. The religious functions, indeed, connected with the architecturally embellished wooden columns above, in their aspect of 'Stablishers' and 'Pillars of the House', were naturally extended to these underlying supports. This quite logical consequence explains the evidence of a distinct cult attaching to the pillars in these crypts, including the invocation of the divinity of the Double Axes, and the provision of vessels for libations or other offerings. It is clear that at the same time these basement rooms also served a practical purpose and were used as cellars and storehouses. Remains of large oil-jars have, in fact, been found in the 'Pillar Rooms' at Knossos and elsewhere. Neither must it necessarily be concluded that all basement rooms in which stone pillars are found were used for ritual purposes. Such supports may often have had constructive uses not connected with the superposition of columns on the floor above.

When, however, as in the case of the South-East Basement of the 'Little Palace' with which we are at present concerned, the pillars are accompanied by

[1] For illustrations of this I may still refer to my work on *Mycenaean Tree and Pillar Cult*, published in 1900 (Quaritch), though much new corroborative material has since come to light.

[2] Plutarch, *De Iside et Osiride*, c. 15, 16.

the small stone vats or basins already described, there are strong *a priori* grounds for supposing that they were invested with a sacral character.

In the present instance there is every reason to conclude that the basement pillars fulfilled a constructive function in supporting the columns of an upper sanctuary.

The western section of this Basement was served by two small staircases, one of them giving access to what seems to have been the central hall of the building, the other, of a more private nature, communicating with a columnar chamber above. This access by means of a narrow stone staircase to a presumably columnar chamber above is also a well-marked feature of the pillar-room in the Royal Villa at Knossos.[1]

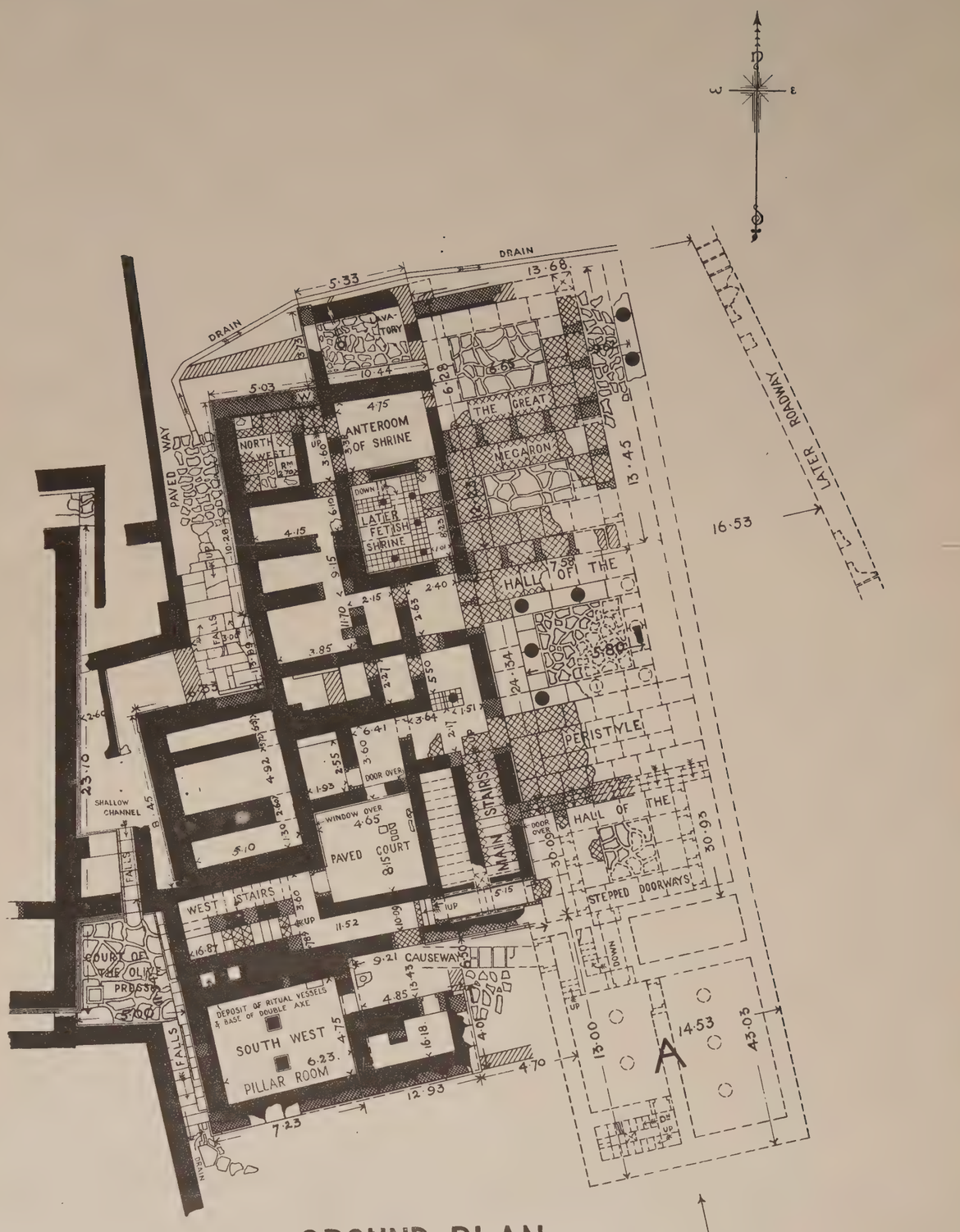
The chamber thus brought into communication with the western basement seems to have had two columns answering to the pillars below (see Plan, pl. VII). At its northern end it had direct access, on the same level, to the central lobby of the Palace—called for distinction the 'Hall of the Stepped Doorways', and to the west, apparently by means of three steps, to a slightly higher level, on which was a group of structures, which included another pillar-room. This two-columned chamber was thus of the nature of a fore-hall. To the east it opened on a longer and more isolated hall following the outline of the three-pillared basement below, and doubtless containing three columns. This there is every reason to regard as having been the principal sanctuary, the southern face of which would have overlooked the light area already described.

We have thus, as shown in the plan (pl. VII), the evidence of a two-storied structure of more or less square outline, and with dual compartments supported by stone pillars below and, *ex hypothesi*, by wooden columns above. This building, as already pointed out, is the southernmost member of a fine system of halls and colonnades that extends along the whole eastern face of the 'Little Palace'. It forms, however, an isolated projection half cut off by the light area in front, and only connected with the halls beyond by a kind of bridge. Such a building, at once accessible and detached, would have been well suited for religious purposes.

Unfortunately, owing to the much disturbed state of this part of the site, minor relics which could illustrate the functions of this columnar building were wanting. Very definite information was, however, forthcoming in regard to a group of structures which, as will be seen, stood in a direct connexion with it to the west, and included a similar 'Pillar Room'.

This connected area, constituting the south-west angle of the 'Little Palace', had already been explored in 1908. It forms a distinct section of the building, communicating with the Hall of the Stepped Doorways by means of an ascending corridor immediately south of the main staircase. On the other hand, it has a separate direct access from the South-East pillar 'Sanctuary', marked by a slabbed causeway (see fig. 81), which crosses a small irregularly paved court in

[1] *Knossos, Report*, 1903, p. 151, and pl. i (*B. S. A.*, vol. ix).



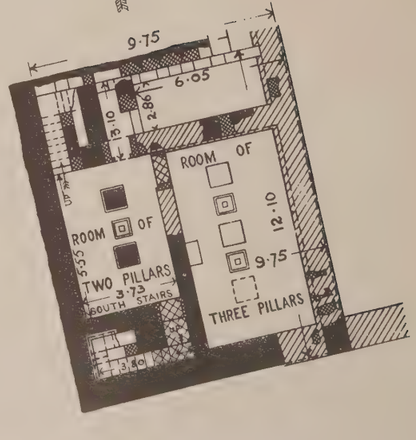
GROUND PLAN

NOTES

FOUNDATIONS	
LIMESTONE & INTERNAL RUBBLE MASONRY	
RUBBLE WALL WITH GYPSUM LINING	
GYPSUM WALLS & DOOR JAMBS	
GYPSUM PAVINGS & STAIRS	
GYPSUM BALUSTRADES	
PROBABLE RESTORATION OF DEFICIENCIES	
PROBABLE POSITION OF WINDOW	W

0 1 2 3 4 5 6 7 8 9 10 20 30 40 50 60 70 Feet

0 1 2 3 4 5 6 7 8 9 10 20 Metres



BASEMENT UNDER A.

CHRISTIAN. C.T. DOLL. MENS. ET DELT. 1910.

PLAN OF 'LITTLE PALACE', KNOSSOS

Published by the Society of Antiquaries of London, 1914

Fig. 81 Paved causeway leading to Pillar Room across small court outside orthostatic gypsum wall; Little Palace, Knossos.

the direction of a side door of the corridor already mentioned, and at the same time gives access to another door leading to the third of this group of pillar-rooms. The exterior wall of this section of the building on its southern and eastern sides was faced with fine gypsum orthostatic blocks, about 82 cm. high (see fig. 81), producing an effect comparable to that of the west wall of the Palace itself. For the more inconspicuous back-wall the architect here, as elsewhere, had contented himself with fine ashlar masonry.

Fig. 82. Double axe and stepped steatite socket from Dictaean Cave (Psychro).

The corridor described, after passing a small paved court on the right, which formed a kind of central light area for this part of the building, reaches a staircase—the 'West Stairs'—which led by a double flight to an upper story. Upon these stairs and in a small shaft to the left of the first landing, connected apparently with the drainage system, was found a group of ritual objects of the highest interest.

So far as the form of the cult was concerned the most significant among these objects were the remains of a socketed base of dark steatite, about 15 cm. in height, of the stepped form characteristic of the bases used for the shafts of the sacred Double Axes. On the sarcophagus of Hagia Triada the axes are seen rising from bases of this form, and actual specimens were found in a sanctuary of the building, associated with the bronze axe blades. Small steatite bases of this kind were also found in association with bronze double axes in the 'Dictaean Cave'. An example of one of these obtained by me from the cave in 1899 is shown in fig. 82, with the shaft restored and surmounted by a double axe. In the present case the remains of the stepped socket were found in the pit on the south side of the staircase, in company with the greater part of a magnificent rhyton of inlaid steatite in the form of a bull's head, while in the

Fig. 83. View of south-west angle of Little Palace, showing Pillar Room by which canal-sluices were found

bordering staircase area came to light another bull's-head rhyton of painted ware, and two alabastra of the same material. A full description of these relics will be given below.[1]

The remains of the steatite base and rhyton were found in the walled pit at a depth of from 1 metre to 1·45 below the first landing of the staircase. It was obvious that they were derived from some upper chamber immediately bordering the staircase on the south, the religious character of which was indicated by the relics derived from it. Although at the time of this discovery no pillar-rooms had as yet been found in the present building, the analogy supplied by the 'Room of the Stone Vases' in the Palace at once suggested the conclusion that these ritual objects had belonged to a columnar hall with the usual pillared crypt. I ventured, therefore, on the prediction that the excavation of the contiguous area to the south would bring to light the pillar basement of such a sanctuary hall.

Owing to the great accumulation of the soil and the necessity of removing structures of no importance in themselves but, in the case of Roman buildings, often combined with cement floors, the work throughout this part of the site was very laborious and involved a deep cutting in the hill-side. The result of the next fortnight's work, however, was completely to verify the above forecast.

The area in question (see fig. 83), which represents the south-west angle of the 'Little Palace', was found to consist of a fine chamber, the dimensions of which —6·23 m. east-west by 4·75 north-south—were larger than those of any other room in the back regions of the building, containing two well-built stone pillars. We have here the crypt or basement of an upper columnar hall of a religious character, the existence of which had been already indicated by the discovery of the ritual furniture.

The pillars themselves were formed of blocks about 65 cm. square, resting on bases. Their surface had suffered a good deal from the effects of a conflagration. There was no trace in this case of any stone receptacle between the pillars, and whatever cult objects or vessels for libation may have been originally placed here had been cleared out with the rest of its contents at a time when a restoration of the upper story was apparently in view. The evidence of this was found in two large piles of unbaked bricks stacked at the eastern end of the room. This material was largely used for the upper structures of the building.[2]

Above the lower courses of the south wall of this pillar-chamber, and evidently fallen from above, was discovered a leaden female image of rude fabric in the attitude of adoration (fig. 84). From its uncouth style this figure must be ascribed to the latest Minoan Age; the attitude indeed recalls that of a terra-cotta figure found in the late Palace shrine of the Double Axes. We may perhaps

[1] See p. 79 seqq.

[2] See A. J. E., *Knossos, Report*, 1905, p. 6, fig. 2 (*B. S. A.*, xi).

infer that some small shrine of a similar character had been set up in this quarter of the Palace by the later occupants, to whom the 'Fetish Shrine' to the north was due. This would indicate that the religious associations attaching to this quarter survived and continued to be respected by the later settlers, who after a period of catastrophe parcelled out among themselves this once stately mansion. The image itself seems to be a rude degeneration of the 'Snake Goddess' type —the serpent's head being clearly visible above the front of the 'turban'.

On the north side of the West Staircase, above and beside which the ritual objects were discovered, is an oblong basement space evidently belonging to the same system, and included within the western projection, which at this point breaks the line of the back-wall of the building (see fig. 85 and Plan, pl. VII). It consists of three rectangular spaces that have the appearance of magazines opening on a narrow passage. This basement was lighted on the north side, answering to the turn of the back-wall, by a window of which indications are preserved.[1] The rectangular wall that includes this group of structures may be taken to supply the outline of a roomy hall above, in close relation with the columnar sanctuary already postulated on the opposite side of the staircase. It is safe, moreover, to conclude that this hall was lighted by a window in the turn of the back-wall, immediately over that of the basement. These windows would have occupied a conspicuous position, commanding as they did the long paved area at the back of the north section of the building, and the importance attached to the position is shown by the change in the wall construction noticeable at this point (see fig. 85). Whereas the whole of the rest of the back-wall before and beyond this point is of fine ashlar masonry with a horizontal break for woodwork, this small section is marked by a course of gypsum blocks, otherwise reserved for the front parts of the building. Looking up the paved area from the north, this western return of the wall was in fact very much in evidence, as will be seen from fig. 85, and importance was evidently attached to its architectural embellishment.[2]

Fig. 84, *a*, *b*. Small leaden image of 'Snake Goddess'. (½)

From the upper hall which occupied this dominant position were certainly derived some fine fragments of Palace Style jars found above the floors of the

[1] Above a gypsum course, 56 cm. high, there is set at this point an upright limestone slab of the same height, which seems to have been in relation with the sill of a window (see fig. 85).

[2] The north wall of the north-western angle of the building was in the same way of gypsum construction. The remains of the sill of a window are also clearly visible at this point.

Back-wall of north section of 'Little Palace'.

South-west return of building.
Remains of sill of window.

Fig. 85. View looking up back court of Little Palace towards return of wall, with remains of window-sill.

Fig. 86. Faceted ewer, probably of natural size, with tassel decoration.

magazines of the underlying basement. With these, moreover, there came to light the remains of a remarkable vessel with painted decoration, partly in relief and of an altogether unique form. This vessel (fig. 86), with its high recurved spout, points to an archaic tradition, itself rather Cycladic than Cretan, and at Knossos indeed best illustrated by the imported Melian 'bird vases' found in the early Temple Repository. There seems to be much probability that this beaked ewer served some ritual or lustral purpose.

The surface of the vase is divided into compartments by vertical ribs, and its sides and fronts present a curious design consisting of three pendent sprays—perhaps conventionalized derivatives of papyrus—the stalks of which proceed from a small disc with trefoil offshoots. This latter feature possibly represents a triple knot, and the decorative Egyptian motives which show lotus or papyrus sprays knotted together afford some distant analogy. An example of raised papyrus decoration is supplied by the fine 'Palace Style' jar from the Royal Villa. The present vase must be ascribed to the same Period (L. M. II).

The discovery of relics fallen apparently into magazines below from upper halls of a religious character affords a close parallel to certain phenomena that presented themselves in the case of the N.W. angle of the Great Palace. Not only frescoes, some of them depicting pillar shrines, but parts of large jars, many of them decorated with the sacred double axe, and architectural fragments, probably belonging to a small shrine, had in that case fallen into the magazines below. Other objects derived from the same upper halls were also found above the pavement of the West Court along the same Palace section, and in this case again the south-west block of the 'Little Palace', with which we are dealing, afforded a remarkable parallel. This corner of the building overlooked a quadrangular paved court, and on the borders of this, near the staircase, came to light fragments of a tall painted jar, with a very graceful reed-like plant design, in a dark-brown glaze on a buff ground, of which other portions were found in the basement magazines. This 'amphora', of which, however, the remains were insufficient for complete restoration, had evidently originally graced one or other of the upper halls of the sanctuary. It represents the very acme of the 'Palace Style'.

It looks as if the very fine house, the terrace wall of which rises beyond the little back court above mentioned and extends for a distance of 23·10 m., may have once been connected by a kind of bridge with the sanctuary quarter of the 'Little Palace'. On the north side of the paved court a bastion of this upper mansion ran out to the borders of the north flight of the West Stairs.[1]

[1] This bastion was cut through, apparently in the last Minoan Age, L. M. III, to allow sufficient space for a shallow stone drain in connexion with an olive press, set in the south-west corner of the paved yard.

The possibility therefore arises that there was some means of communication from the head of the West Stairs to the mansion beyond (see Plan, pl. VII).

From what has been said above it will be seen that there are strong reasons for believing that the whole of the structures that make up the south-west corner of the 'Little Palace', consisting of the Pillar-Room, basement magazines and the halls above approached by a special staircase, were devoted to religious purposes. On the other hand, it has been shown that this more or less self-contained system stood in an intimate relation to that represented by the Pillar-Rooms immediately to the east of it, with which it was directly linked by the paved causeway. In other words, the whole southern section of the 'Little Palace' represents a continuous sanctuary quarter.

We have here, in fact, a phenomenon closely paralleled by the western wing of the Great Palace. The whole trend of the evidence brought to light in that region has, in fact, more and more tended to show that the greater part of this Palace region served sacral ends. There were here not only pillar-crypts and a succession of small shrines, but a whole group of pillar-halls above, which were made use of for religious functions. It would seem that the Minoan sanctuaries which formed an integral feature in both the 'Great' and the 'Little Palace', were not by any means confined to little shrines, such as that depicted on the miniature fresco, but were designed for a considerable accommodation of devotees.

§ 2. *The bull's-head 'rhyton' and other ritual vessels from the 'Little Palace', with some comparative examples.*

The most remarkable object found in connexion with the south-west sanctuary of the 'Little Palace' was the 'rhyton' in the form of a bull's head. With the exception of the inlays of shell and rock crystal, its material is of black steatite. Its height from the chin to the top of the head is 20 cm., so that it may roughly be described as about half the natural dimensions.

The greater part of the head itself was preserved, but a part of the left side and the left eye was wanting, also the horns and ears. The horns reproduced in the annexed figures from Monsieur Gilliéron's restoration (fig. 87, *a*, *b*) were fixed by means of square attachments, secured in each case by a pin inserted from the top of the head by means of a vertical perforation (see fig. 88, *a*, *b*. This method corresponds, in fact, with the Minoan system of locking doors (illustrated by remains in the South House at Knossos) by means of a metal pin pushed through a 'keyhole' into the wooden bolt.

Judging from the small size of the attachments, the material of the horns was probably of wood, and coated with thin gold foil, of which some remains were

found in the deposit. But the ears, the sockets for the attachment of which, round in shape (see fig. 88, *a*, *b*), are larger in proportion, were evidently of

Fig. 87, *a*, *b*. Bull's-head 'rhyton' of inlaid steatite, Little Palace, Knossos.

heavier material, though it is impossible to say whether they were of precious metal—which would account for their disappearance—or of steatite like those from the 'Tomb of the Double Axes'. In this case, the hole for the projection, by which the ears were attached went right through the side wall of the 'rhyton', so that it may have been secured by an internal rivet.

The characteristic features of this type of vessel consist of a fairly large

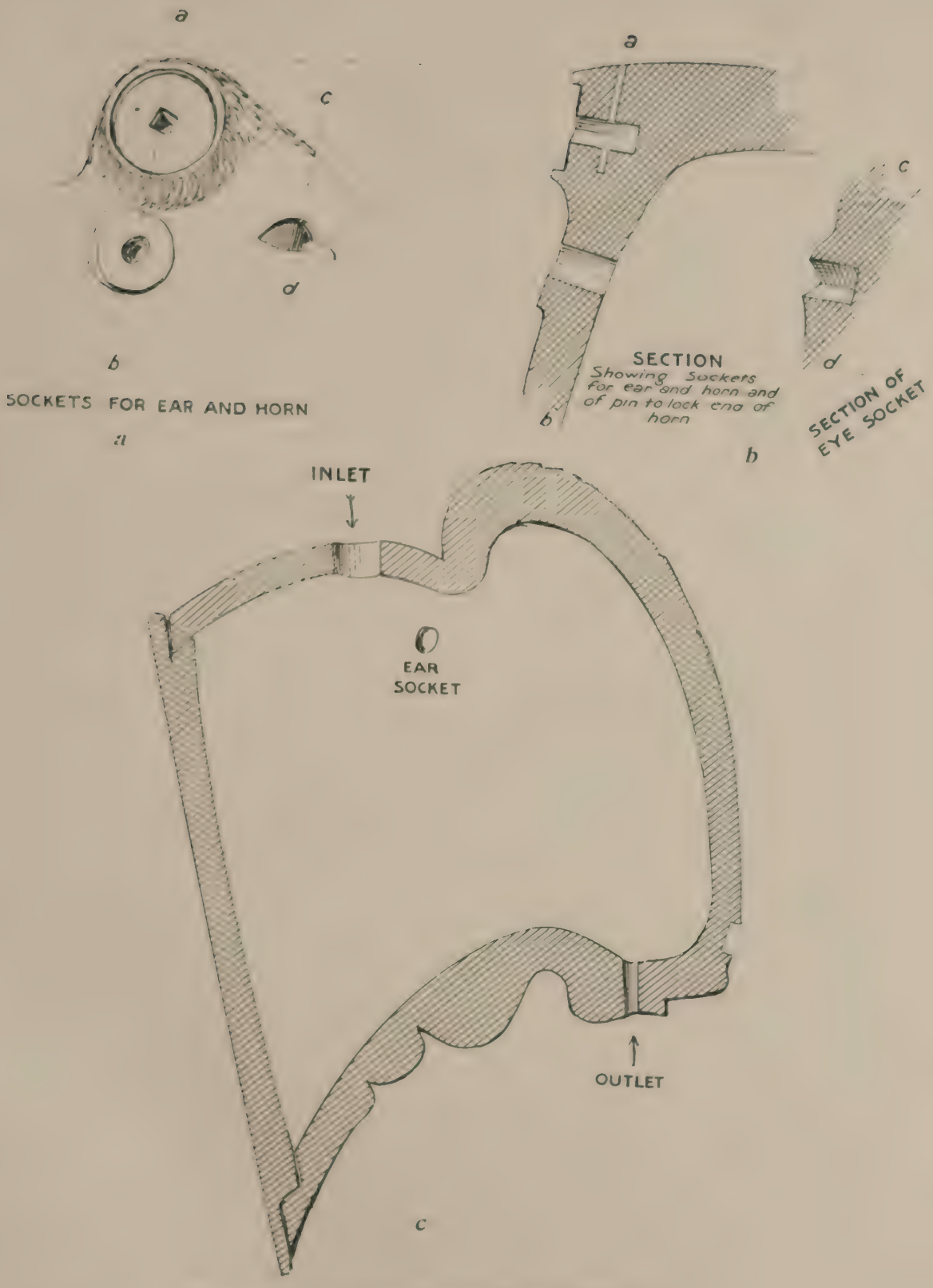


Fig. 88, *a*, *b*, *c*. Details and section of bull's-head 'rhyton'. ($\frac{1}{2}$)

opening on its upper surface for pouring in liquids, and a smaller one below by which they can slowly escape. The larger hole, in this case, is just behind the crown of the head, and the smaller in the lower lip (see section, fig. 88, *c*), as is usually the case with rhytons in the form of animals' heads.

We may infer from these features that this type of vessel was designed for libations. The classical term 'rhyton' belongs, strictly speaking, to a late class of vases terminating in animals' heads, made use of at banquets. Owing to the analogy in form, due to the perforation at the animal's mouth, the word has been conveniently applied to this Minoan class,[1] the religious intention of which can hardly be doubted. On the evolution of this type on Cretan soil more will be said below.

Fig. 89.

The present example was formed out of two pieces of steatite. The bull's head and neck were wrought out of a solid mass, and set by means of a reveal round the edge into a flat plate forming the base (see section, fig. 88). On the outer surface of this, the artist who executed the work had made—with what object it is difficult to say, perhaps for his own guidance in the work—a graffito sketch of a bull's head (fig. 89). It is interesting as showing how the horns were intended by him to spring from the head, and the indication has been made use of in Monsieur Gilliéron's restored drawing (fig. 90).

Round the nostrils of the animal is a curving inlaid band, consisting of white shell, inserted in a shallow groove with a rectangular section. The shell used is evidently a large bivalve, and seems to be the *tridacna squamosa*, which was already imported into Crete from the Persian Gulf at this period.

But the most striking feature of this head was the perfectly preserved right eye. The lens of this consisted of rock crystal, on the slightly hollowed lower surface of which are painted the pupil and iris. The pupil is a brilliant scarlet, the iris black, the rest of the cornea white. The crystal setting is inserted in a border of red stone resembling jasper, which surrounds the white field of the eye like the rims of bloodshot eyelids. To add to the effect, the crystal lens of the eye both illuminates and magnifies the bright red pupil, and imparts to the whole an almost startling impression of fiery life.

Long hairs are engraved falling about the forehead, brows, and cheeks of the animal, showing that he was of a shaggy breed. Certain incurved, angular designs, moreover, on the forehead, the sides of the head, and neck are evidently intended to indicate coloured patches, resembling those seen on some of the

[1] e.g. by Dr. Karo, *Minoische Rhyta, Jahrbuch d. k. d. Arch. Inst.*, 1911, pp. 250 *seqq.*

painted designs of bulls. That over the forehead is very symmetrical, and somewhat suggests a Minoan shield. It is possible that it is a religious symbol.[1]

On the face of the bull's-head 'rhyton' from the Tomb of the Double Axes the inlays were of a quatrefoil shape. This suggests the conventional cruciform decoration which stands for spots on some of the cows of the Egyptian Goddess Hathor.

The locks above the forehead and on the protuberance of the head between the horns are of a somewhat schematic character, and betray derivation from a more naturalistic prototype. Of the character of this prototype, moreover, additional evidence is afforded by the appearance on the ridge between the horns of a raised roundel with revolving rays, repeated in a flatter form between the horns. This ornament is evidently taken over from a metal-work original—the curving rays themselves recalling a similar decoration on the studs of a magnificent 'horned' sword from grave 44, at Zafer Papoura,[2] which had been probably coated with gold plate.

[1] Dr. Karo, *Minoische Rhyta*, *l. c*, p. 252, observes of this, 'Vorn auf der Stirn ist eine Figur eingraviert die am ehesten an minoische "Palladien", aber mit spitzen Ecken, erinnert: doch wohl auch ein religiöses Symbol.'

[2] *Archaeologia*, vol. lix, p. 62, fig. 66.

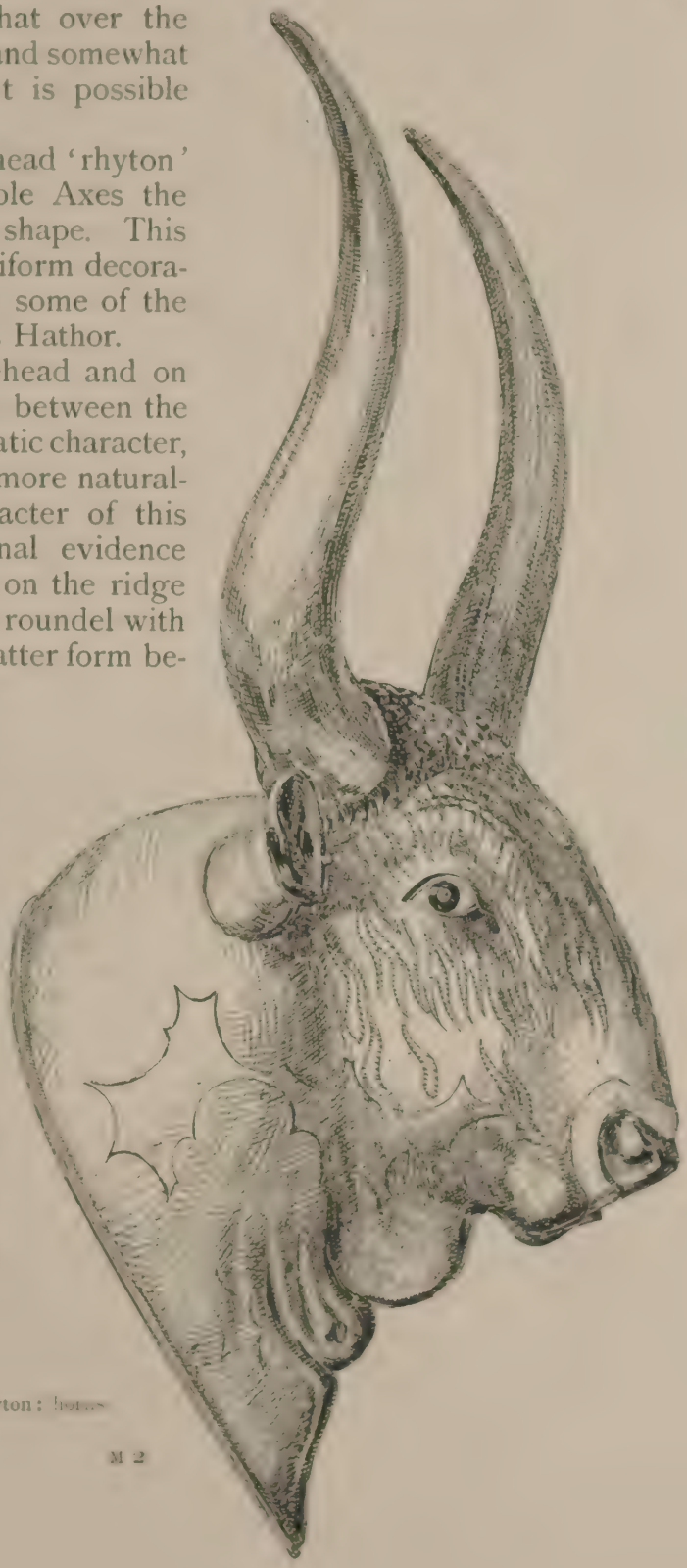


Fig. 90. Side view of bull's-head rhyton: horns and ear restored. (½)

A striking parallel to this system of decoration is, in fact, found in the case of a silver 'rhyton' from the fourth Shaft Grave at Mycenae, on the forehead of which was fixed in a similar position a large rosette formed of gold plate. This vessel, formerly supposed to be a kind of votive head with a socket for the reception of a double axe—after the analogy of certain small votive bull's heads with this symbol—has now been shown by Dr. Karo[1] to be a 'rhyton', in shape strikingly resembling the present example, though of slightly smaller dimensions.[2] Further investigation, indeed, revealed the second smaller perforation in the lower lip for the escape of the fluid contents.

Owing to the oxidation of a large part of the front surface, the appearance of this Mycenaean bull's head gave a very imperfect idea of its importance as a work of art. Careful cleaning on the part of a Museum restorer, under Dr. Stais' direction, has now brought out some better preserved parts of the upper surface, which show an extraordinary truth to nature in the modelling and details.[3] The lifelike and at the same time artistic rendering of the locks 'recalls the treatment of the hair in the Age of Myron'.

The somewhat conventional regularity of this detail in the steatite example, shows that, unique as it is in its technique of inlaid stone-work, and wonderful as is its execution in many ways, it stands on the whole in a secondary position when compared with the silver rhyton from the Shaft Grave. The silver rhyton itself, as has been well pointed out by Dr. Karo,[4] is unquestionably of Cretan and probably Knossian workmanship, and is a masterpiece of the art of the First Late Minoan Period. The steatite specimen from the 'Little Palace' is shown, on the other hand, from its close association with painted vessels in the 'Palace Style', including a similar bull's head, to be described below, to belong to the succeeding Second Minoan Period. Its dependence on an earlier metal-work class, illustrated besides by the decorative roundels on the front and crown of the head, is thus explained by its slightly later date—the fifteenth rather than the sixteenth century B.C.

An instructive parallel phenomenon is, in fact, found in the case of a rhyton in the shape of a lioness's head, formed of very fine yellowish white limestone, having the appearance of marble. It was found with fragments of others in the 'Stone Vase Room' at Knossos,[5] and probably belonged to the last Palace

[1] *Minoische Rhyta, Jahrb. d. k. d. Arch. Inst.*, B. xxvi, 1911, pp. 249 *seqq.*

[2] The following comparative measurements are given by Dr. Karo, *loc. cit.*, from nozzle to forehead: Myc. head 155 mm., Knossian 175; between spring of horns, Myc. ·08 mm., Knossian 105.

[3] Karo, *op. cit.*, p. 251, and see p. 250, fig. 1.

[4] *Op. cit.*, p. 251. Dr. Karo lays stress on the near relation of the 'rhyton' from the 'Little Palace' to that from the fourth Shaft Grave. At the same time the associated finds on the West Staircase of the 'Little Palace' indicate a somewhat later date.

[5] *Knossos, Report*, 1900, p. 31 (*B. S. A.*, vi); P. et C., *Histoire de l'Art*, viii, p. 161 and fig. 87 (from

period (fig. 91). Though of harder material, and in a more schematic style, this work shows certain close points of comparison with the steatite bull's head. The vessel was a rhyton with a larger round opening (diam. 2·7 cm.) in the upper part of the neck, and a smaller one (diam. 0·9 cm.) on the lower lip. The section of the neck may originally have been closed by a metal disc, the rivet holes for which are seen round the lower margin of the neck. In the nozzle a piece of red

Fig. 91. Rhyton in form of lioness's head, of marble-like limestone. 'Stone Vase Room', Knossos. (½)

jasper, of which a fragment was found still adhering, had been inlaid, secured by a projecting cylinder that went right through the wall of the vessel (see section, fig. 92). A rim of the same brilliant material surrounded the eye-sockets as in the case of the bull's head, and an incised circle in the flat surface within seems to show that in this case, too, there was some separate inlay for the pupil of the eye (figs. 91, 92).

The front of this 'rhyton' and sections of the nostril and details of the eye are given in fig. 92, from drawings by Mr. Theodore Fyfe. There can be no question that this vessel, like the bull's head, stands in direct relation to an earlier type in precious metal, of which we have an example in the gold lion's head, of heraldic style, also found in the Fourth Shaft Grave, at Mycenae. Reminiscences of such a prototype in metal-work[1] are visible in the prolongation of

[1] Cf. De Mot, *Rev. Arch.*, 1904, p. 214, and Dr. Karo's remarks, *op. cit.*, pp. 253, 254.

my photograph; Karo, *op. cit.* p. 253. In my original Report it was described as possibly the socket for a fountain, but its true character has been long apparent.

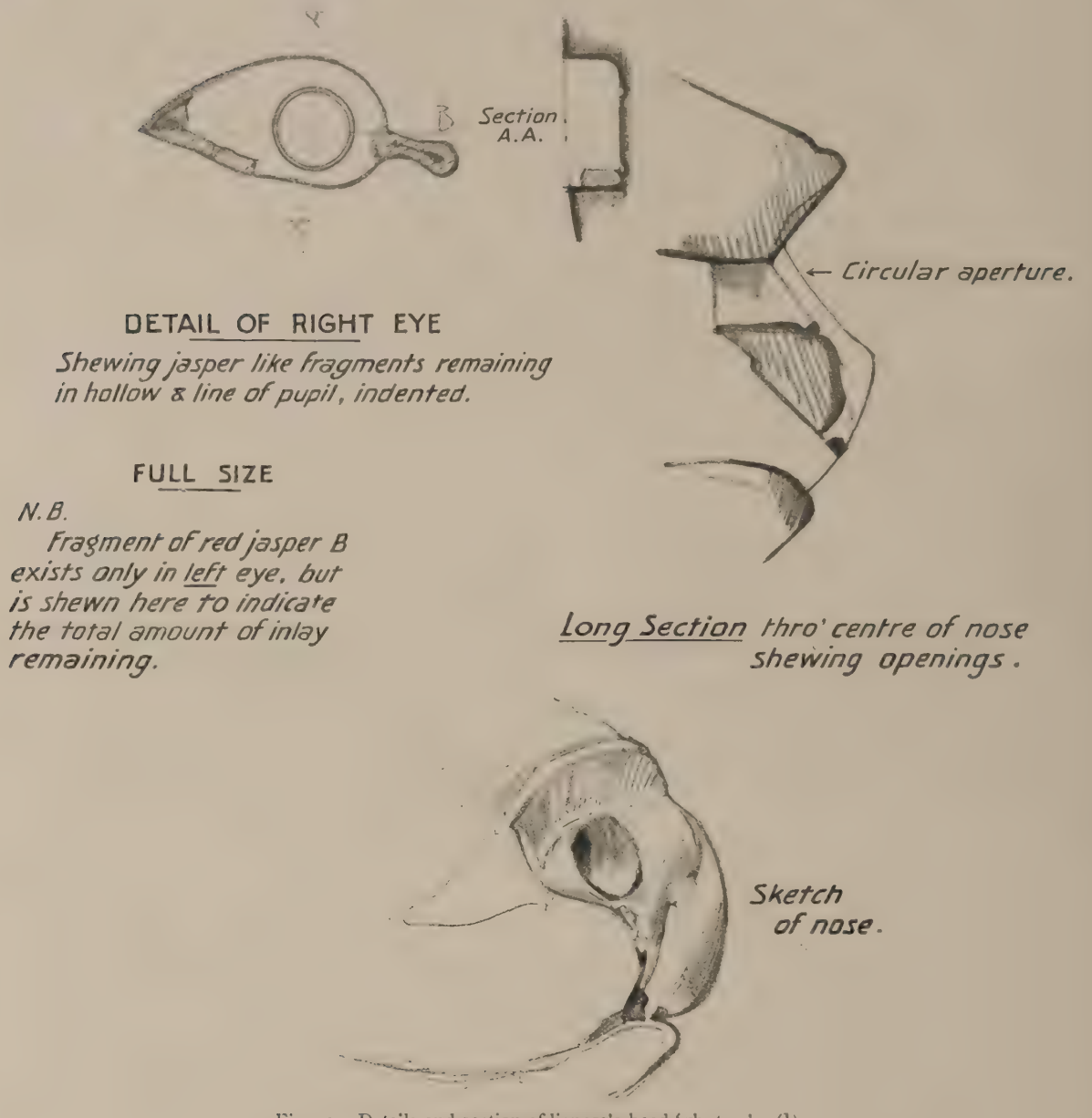

A
B
Section A.A.
← Circular aperture.
DETAIL OF RIGHT EYE
Shewing jasper like fragments remaining in hollow & line of pupil, indented.
FULL SIZE
N.B.
Fragment of red jasper B exists only in left eye, but is shewn here to indicate the total amount of inlay remaining.
Long Section thro' centre of nose shewing openings.
Sketch of nose.

Fig. 92. Details and section of lioness's-head 'rhyton'. ($\frac{1}{1}$)

the inner corners of the eyes at the opening of the lachrymal gland, the rendering of the hairs along the jaws, the sharp outline of their edge, and of the ridge above the eyes. The gold lion's head was doubtless itself of Minoan fabric.

It may here be noted that the stone rhyton in the form of a lioness's head, from the Palace of Knossos, derives extraordinary interest from the discovery,

in the temple at Delphi, of a fragment of a similar vessel[1] in the same marble-like material, representing a Cretan variety of limestone. Although only the snout is preserved, the identity of form, technique, and material proclaims it to be a Knossian import, belonging to the last Palace period. The nostrils consisted, as in the case of the Knossian head, of an inlaid material, and towards

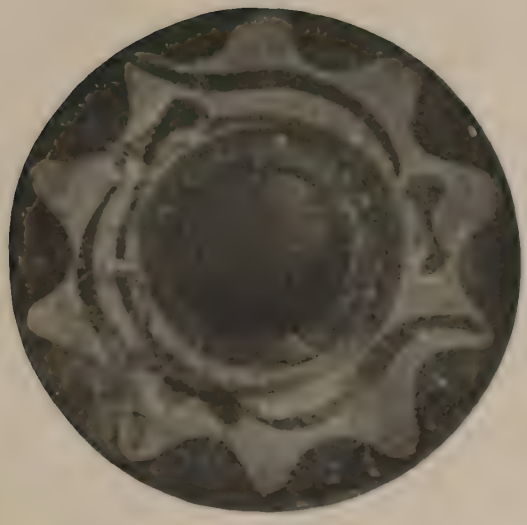


Fig. 93. Flat clay alabastron. (*c.* ½)

Fig. 94. Alabastron of Egyptian type, with design of octopus.

the upper part of the snout on its right side the surface is cut away for some superficial inlay, recalling that of the bull's head from the 'Tomb of the Double Axes'. We have here an extraordinary illustration of that most ancient religious connexion between Crete and Delphi, of which the Homeric Hymn to Apollo still records the tradition.

It has already been mentioned that remains of other ritual vessels in painted terra-cotta were found in the west staircase of the 'Little Palace' in the area contiguous to the shaft containing the base of the double axe and the bull's-head rhyton of steatite. Among these were the two clay alabastra reproduced in figs. 93, 94, and a rhyton of the same material in the form of a bull's head (fig. 95, *a*, *b*).

[1] Perdrizet, *Fouilles de Delphes*, v. 3, fig. 13. Cf. De Mot, *Rev. Arch.*, 1904, pp. 214, 215; Karo, *op. cit.*, pp. 254, 255, and p. 256, fig. 7.

Of the alabastra the flat three-handled specimen (fig. 93), answers in shape and style to that found in the Tomb of the Double Axes, near the cult objects. Several alabaster vessels of this type were found on the floor of the Room of the Throne at Knossos—a chamber evidently designed for some sacral purpose—near an overturned oil-jar, and were in all probability destined for some function

Fig. 95 *a*. Fig. 95 *b*.

Bull's-head rhyton with trefoil patterns. Little Palace. (⅔)

of anointing. The other higher specimen without handles (fig. 94) is a clay derivative of an Egyptian class of alabastra common at the beginning of the XVIIIth Dynasty, of which an imported example was found in the Royal Tomb of Isopata.[1] It presents a painted design of an octopus amidst rocks and sea-weeds in the Palace Style. The design resembles, though in a slightly inferior style, that of a beautiful globular vase from Gournià, belonging to the close of the First Late Minoan Period.[2]

A good deal of the front and upper part of the bull's head was wanting, but enough remained to allow of its fairly complete restoration (see fig. 95 *a*, *b*).

[1] *Tombs of Knossos*, p. 147 and pl. xcix, S. 5 (*Archaeologia*, vol. lix).
[2] Boyd-Hawes, *Gournià*, plate H.

Parts of the rim of the upper orifice into which the liquid was poured were preserved, and behind it was a small handle designed for the suspension of the vessel, a feature which recurs in the case of other analogous rhytons, such as the gold lion's head from Mycenae and a fox's head in the Ashmolean Collection.[1] The painted decoration, notably such features as the trefoil pattern seen both on the centre of the base and the side of the head, is very characteristic of the 'Palace Style'. In other words, this rhyton and the other relics from the same deposit belong to the last brilliant phase of the Little Palace (L. M. II), before its partial destruction and re-occupation.

Other similar bull's-head rhytons of painted ware belonging to this and the succeeding third Late Minoan Period are known, two from Rhodes,[2] one apparently of Cretan fabric, and another from Karpathos.[3] Still finer examples belonging to the First Late Minoan Period have come to light from several Cretan sites,[4] the finest being from Gournià.[5] A great part of the surface was covered 'with a shining white slip to imitate silver'. At Knossos the history of these painted bull's-head rhytons can be carried back still further. A part of the left side of the face, belonging to a vessel of this class, with a white eye laid on in enamel-like slip like that of the Gournià specimen, was found in a M. M. III deposit N.W. of the Palace. A fragment showing the right eye and part of the face of another specimen, which was discovered by me this year beneath the pavement of the 'Room of the Stone Pier' on the east side of the Palace, presented all the characteristics of the most flourishing age of polychromy, and must be ascribed to the Second Middle Minoan Period.[6] This is the earliest known example of the kind.

A parallel form of rhyton representing the whole animal occurs, which can be traced back to a still remoter date. Two fine specimens of this type of vessel, belonging to the early part of the Late Minoan Age, were found by

[1] Illustrated by De Mot, *Rev. Arch.*, 1904, p. 215, and p. 216, fig. 4. It is there called a 'dogs' head', but the pointed snout and ears are more typical of a fox. It was acquired by me in Athens, and was said to have been found at Tiryns.

[2] Karo, *Minoische Rhyta*, pp. 259 *seqq.*

[3] Paton, *J. H. S.*, viii (1887), p. 449, pl. 83, *q*; De Mot, *Rev. Arch.*, 1904, p. 215. The escape-hole is here in the base.

[4] Karo, *op. cit.*, p. 252, n. 2, has summarized these finds. The examples cited are from Phaestos, Palaikastro, and Gournià.

[5] Boyd-Hawes, *Gournia*, p. 60, and pl. i. 1. It had 'a hole of 2 cm. diam. in the top of the head and 8 mm. diam. in the muzzle'. This latter hole was in this case rather in the nozzle than the lower lip.

[6] The stratum in which this fragment was found lay between the gypsum pavement and the face of a cutting into the Neolithic, and had a depth of 80 cm. The bull's eye was black with a red rim, the cheek below black with red slip and white. The deposit contained both M. M. III and M. M. II fragments, but the colours on the fragment of the rhyton recurred on one of the undoubted M. M. II sherds.

Mr. Seager at Pseirà. In one case the animal is very naturalistically moulded,[1] in the other the body is covered with a kind of network harness. Others were found at Phaestos,[2] and fragmentary specimens in the Cave of Psychro.[3] Intermediate examples are at present wanting, but rhytons in the form of miniature bulls were found by the Cretan Ephor, Dr. Xanthudides, in primitive tholos tombs of the Messarà district of Crete belonging to the close of the Early Minoan or the very beginning of the Late Minoan Age. Two of these, moreover, are of exceptional interest, being coupled with small figures of men performing acrobatic feats about their horns (fig. 96). We have here the earliest record of these sports, and at the same time the ritual character of the vessels affords additional evidence of the religious connexion in which they seem to have stood. For these are true rhytons, with the openings for pouring in the fluid, in the one case on the back of the neck, in the other behind, and the smaller perforation in the mouth for letting it escape more gradually (fig. 88).[4]

The appearance on Cretan soil of these bull-shaped rhytons is as far as our present data go quite abrupt, and not led up to by any analogous forms of earlier date. This in itself is a remarkable fact, as vessels in the form of animals existed from a period corresponding with the earliest Minoan Age and are characteristic of an extensive Anatolian province extending from Troy to Cyprus. Both in this region and in American countries such as Peru and New Mexico, where such animal vases are frequent, their evolution connects itself with a simpler class of clay vessels imitated from skins. The typical feature of these skin or 'askos' types is the prominent, slightly-recurved neck. A handle often links this to the back of the vase, and three or four feet are added. From this to the complete animal type is but a step, and in Cyprus and Troy, as well as among the Peruvians and the Zuñi and Laguna Indians, both forms are seen side by side. Vessels in the form of pigs, sheep, and other animals appear already in the Third Settlement at Hissarlik, and bull vases are seen among the many zoomorphic forms of the Copper Age tombs of Cyprus.[5] In the case of these Cypriote examples the mouth of the vessel is regularly placed above the neck of the animal. It needed only to perforate the snout or mouth to have

[1] Seager, *Excavations in the Island of Pseirà*, pl. ix.

[2] *Ibid.*, p. 23, fig. 7.

[3] Hogarth, *B. S. A.*, vi, p. 104 and fig. 33.

[4] By the kindness of Dr. Xanthudides I am able to reproduce these specimens. That with the two acrobats is from Kumasa, the other from Porti. The head of the first was figured by Mosso (*Escursioni nel Mediterraneo*, p. 184, fig. 95). The other has not been hitherto reproduced. Another rhyton of the same type was found at Kumasa, and a further specimen at Mochlos in a tomb (no. xi) of the M. M. I period (Seager, *Explorations in Mochlos*, 1912, p. 60, fig. 29). This specimen presented the peculiarity of having the eyes as well as the mouth perforated.

[5] Two examples from Dali are figured by Cesnola, *Cyprus*, pl. viii.

Fig. 66. 'Rhytons' in the shape of bulls with acrobatic performers, from Early Minoan Ossuaries, Messara, Crete.

a perfect 'rhyton'. This ritual type, however, appears to have been quite unknown among the early Anatolian animal vases. On the other hand, though the skin type or primitive 'askos' is well represented in Early Cycladic deposits, no animal vases of the Trojan class have as yet come to light from them.[1] Moreover, in Crete, while the influence of the gourd and of stone vases is well marked among Early Minoan ceramic types, the imitation in clay of skin vessels seems to have been practically unknown. The appearance at the close of the Early Minoan Age of these bull rhytons is the more remarkable, and may eventually be found to connect itself with some impulse from the Anatolian side.

It may be assumed that the rhytons in the shape of the bull's head alone represent in a more compendious and easily-handled form those reproducing the whole animal. This principle of the part for the whole finds indeed an exact analogy in the case of the Cretan hieroglyphic signs —the full profile figure of a bull occurring only in the more primitive class,[2] while in the later system the head alone is delineated.[3] The conspicuous place taken by bulls in Minoan religion is shown by a variety of evidence. The sacral horns, constantly associated with the double axe, are the characteristic feature of its altars. These, as well as the *bucrania*, point to actual sacrifice such as that of the Cretan ibex and of the boar, of which we have actual illustrations on Minoan gems.[4] We may infer that these libation vessels in the bodily form of bulls prefigure an actual sacrifice of the animal. It is, of course, possible that in process of time blood offerings may have taken a transmuted form, and the rhytons in the shape of the animal's head alone seem to stand further from the primitive rite.

The religious symbolism of the bull's-head rhytons is borne out by the parallel appearance, among Minoan and Mycenaean remains belonging to the beginning of the Late Minoan Age, of those in the form of lions' or lionesses' and dogs' heads, these animals being also closely associated with the cult of the Minoan divinities. Animal heads, evidently representing rhytons, are depicted among the vessels brought by the Kefti chieftains on the tomb of Rekhmarà, and among these, besides the heads of a bull, lion, and dog, is seen that of a

[1] A marble vase, however, of early Cycladic fabric, in the form of a sheep, with three cavities in its back, was found at Amorgos. It is now in the Ashmolean Museum.

[2] *Scripta Minoa*, p. 206, no. 61.

[3] *Ibid.*, nos. 62, 63.

[4] The sacrifice of a Cretan ibex or Agrimi is seen on a lentoid in the Berlin Museum (*Cat.*, pl. i, 22), of which an enlarged representation is given in *Scripta Minoa*, i, p. 169, fig. 99. The sacrifice of a boar is illustrated by a gem from the lower town of Mycenae (Ἐφημ. ἀρχ., 1888, pl. x, 36; Furtwängler, *Ant. Gemmen*, pl. ii, 18: vol. I, p. 9). The animals are laid in the first case on an altar with *bucrania*: in the second case on a kind of table.

griffin,[1] the sacred character of which speaks for itself. So, too, among the Cypro-Mycenaean rhytons from Enkomi is a glazed ware example in the form of a ram's head,[2] specially appropriate to the Cypriote cult.[3] That the Goddess of the Dove would demand ritual vessels in the form of her special attribute might have been expected from these analogies. It has already been suggested that the polychrome vase of M. M. I date, in the form of a dove,[4] found in the Early Pillar basement at Knossos, may have been a form of libation vase, though it cannot be called a rhyton in the proper sense of the word, since it has only a single opening, in front of the head. Of true rhytons in this shape no evidence is as yet forthcoming in Crete or the Aegean area, and we have to turn to the more easterly Mediterranean region, where, as we see by the cult of Paphos and Askalon, the dove attribute of the Goddess was specially prominent. Rhytons of the typical Minoan class, presenting the form of a dove with a larger opening on the back and a smaller in front of the head, have recently come to light among the Late Hittite remains in Northern Syria.

The adoption in the Hittite area of a type of religious vessel of Minoan origin is itself a highly suggestive phenomenon, pointing as it does to something more than a mere commercial relationship. Nor, as we shall see, do these dove rhytons stand alone.

In Cyprus the archaic type of rhyton presenting the whole body of the bull continued to be reproduced to the latest Minoan age. Side by side with this, however, occurs the later form, consisting of the head alone.[5] The occurrence, moreover, of what appear to be rhytons in the form of bull's heads among the Keftiu offerings, and the Syrian associations in which they appear, make it probable that such vessels were already made at an earlier date in the Minoan factories that seem to have existed on the mainland side.[6] That this Keftian or Minoan influence was of a very intimate kind is shown by the fact that the bull's-head rhyton became acclimatized in Commagene, and was reproduced

[1] See De Mot, *Vases égeens en forme d'animaux*, *Rev. Arch.*, 1904, pp. 201 *sepq.* The vessels in the form of animals' heads on the Rekhmara Tomb were, however, first recognized as rhytons by Karo, *Minoische Rhyta*, *op. cit.*, p. 264.

[2] *B. M. Excavations in Cyprus*, p. 33 and pl. iii (Tomb 86).

[3] If the glazed ware rhyton in the shape of an equine head from Enkomi (*B. M. Excavations in Cyprus*, pp. 33, 34, and pl. III 18, as it appears to me, rather that of an ass than a horse, it would fit in with the sanctity of that animal in the neighbouring Hittite regions.

[4] See D. G. Hogarth and F. B. Welch, *Primitive Painted Pottery in Crete*, *J. H. S.*, vol. XXI (1901), p. 78 and p. 79, fig. 1.

[5] *B. M. Excavations in Cyprus*, p. 37, fig. 65 (1077). From Tomb 67, Enkomi.

[6] Keftian craftsmen also worked for the Syrian princes. In Thothmes III's record of the battle of Megiddo, a chief of Tunep is seen followed by an artist (?he who makes alive?) in Keftian garb, holding up what appears to be a gold rhyton in the form of a goat's head (Petrie *Hist. of Egypt* XVIIth XVIIIth dynasties, p. 109, fig. 52).

by the native potters. I am here able to reproduce (fig. 97) a late Hittite example of this class of ritual vessel from a tomb in the neighbourhood of Ain

Fig. 97. Bull's-head 'rhyton' from tomb near Ain Tab.

Tab,[1] and dating probably from about 1000 B.C. In having its larger opening in the neck it follows Cypriote analogies, but the smaller orifice is in the lower lip, in accordance with the earliest Minoan prototypes. The character of the eye recalls the rudest sub-Minoan workmanship.

[1] This rhyton is in the Ashmolean Museum.

II. *Effigies of Saxon Bishops at Wells. By the Very Rev.* Joseph Armitage Robinson, *D.D., F.S.A., Dean of Wells.*

Read 11th December, 1913.

In the choir aisles of the Cathedral Church of Wells there is a series of recumbent effigies of Saxon bishops, which have not received the attention they deserve. Solemn figures, boldly sculptured, with a rich variety of dress and pose, they are the equals in grace and dignity of the famous statues on the west front. They are far better preserved, for they have not been worn by the weather, and apart from some accidental breakages they are in excellent condition. If they do not come from the great sculptors who wrought the figures outside, they are the work of their fathers before them, and they have something to tell us of the development of English carving in the west. Not less interesting than their art is the history of the successive changes of name and of position which they have undergone in the course of seven centuries.

I. We may begin their study with what John Britton saw and was told, when he wrote on the Cathedral Church of Wells in 1824. This will serve as a middle point from which to trace their earlier and their later story.

> Three in the north aile of the choir, on the stone seat at the back of the stalls, are said to be those of *Brithelm*, *Kinewald*, and *Alwyn*; the first of whom died in 973; the second in 975; and the last in 1000: yet from the style of costume, and other circumstances, it may be inferred that scarcely one of them is anterior to the Norman times. Leland says, 'In boreali insula juxta Chorum. Quatuor tumuli et imagines Episcoporum Wellen. quae referunt magnam vetustatem': but he has not attempted to name them. The fourth, on the same side, is said to be *Bishop Giso*, who died in 1088; and Bishop Godwin inclines to that opinion: yet there is reason to doubt its correctness, for the effigy has only a priest's cap, and no mitre; the right hand is upraised, as in the act of giving the benediction. One of the other figures also wears a cap, and is similarly represented. The remaining effigies, both of which have mitres and wreathed staffs, or crosiers, are habited *in pontificalibus*, and have their hands crossed.
>
> In the south aile of the choir, in nearly similar situations to the above, there are three other Episcopal effigies of remote date: these also have been mentioned by Leland, but without any appropriation, except the one towards the west: on which, he says, the word *Burwoldus* is inscribed. That Prelate died about the year 1009. The

figure thus referred to, is represented with his hands lying flat across his body, a plain staff knobbed at the top, but not crooked, and the strings of his mitre spread over his shoulders, so as to form a kind of arch or pediment. The two other figures are said to be those of the rival Bishops, *Ethelwyn* and *Brithwyn*, both of whom died in the year 1026 . . . . The easternmost, or that of Brithwyn, as commonly designated, is a very boldly sculptured figure, of Purbeck marble, upon a plain tomb, thickly coated with a yellow wash. His arms are placed across his body; his crosier is surmounted by rich scroll-like foliage; and foliage, similarly rich, ornaments the recess in which his head appears to repose.[1]

This account of Britton's calls for several remarks. First, it would appear, from the way in which he refers to Leland, that the inscription on Burwold's tomb cannot have been seen by Britton.[2] It is obvious also that the other tombs had no inscriptions when he saw them: and he doubtless got the names from Collinson, whose account we shall quote presently.

Next, we may observe that some of Britton's remarks upon the effigies require correction. His statement that Giso and another had caps and not mitres is an error. Two of the figures indeed have very low mitres, which look like caps—but mitres they certainly are: and there are indications that they had pastoral staves, which are now broken away. Again, the plain staff knobbed at the top, which he notes for Burwold, is in fact part of a pastoral staff which had an elaborate knob below the crook: above this all is broken away, except a small piece of stone which supported the crook. Once more, the description of Brithwyn's effigy as wrought in Purbeck marble finds no explanation in any of the seven images that now remain, which are of the local Doulting stone.

We now come to a further point of interest. We note the absence from Britton's list of the name of Dudoc, the immediate predecessor of Edward the Confessor's bishop, Giso. But it is on record that Dudoc was buried on the south side of the high altar, and Giso on the north side of it, in the church which stood in their days.[3] We should therefore expect to find an effigy of Dudoc in the south aisle opposite to the site assigned to Giso. But neither Britton's plan nor Carter's earlier one shows any monument in this place. Britton, however, in a note to p. 107, speaking of Bishop Drokensford's effigy,[4] says: 'This tomb

[1] Pp. 105 f.

[2] So also on p. 19 Britton says: 'His name is said, by the Canon of Wells, to be inscribed on a tomb here.'

[3] *Historiola de Primordiis Episcopatus Somersetensis* ('Ecclesiastical Documents,' published by John Hunter for the Camden Society, 1840), p. 21: 'Gyso . . . . sepultus est in ecclesia quam rexerat, in emiciclo facto in pariete a parte aquilonali prope altare, sicut Duduco praedecessor ejus sepultus est a meridie juxta altare.'

[4] Britton himself does not assign this tomb to Bishop Drokensford, but gives him the monument of William Bitton I, which stands a little to the north-east. The mistake had been made in the second edition (1814) of John Davis's *Guide to the Cathedral*, though not in the first (1809).

Fig. 1. Nameless Saxon bishop

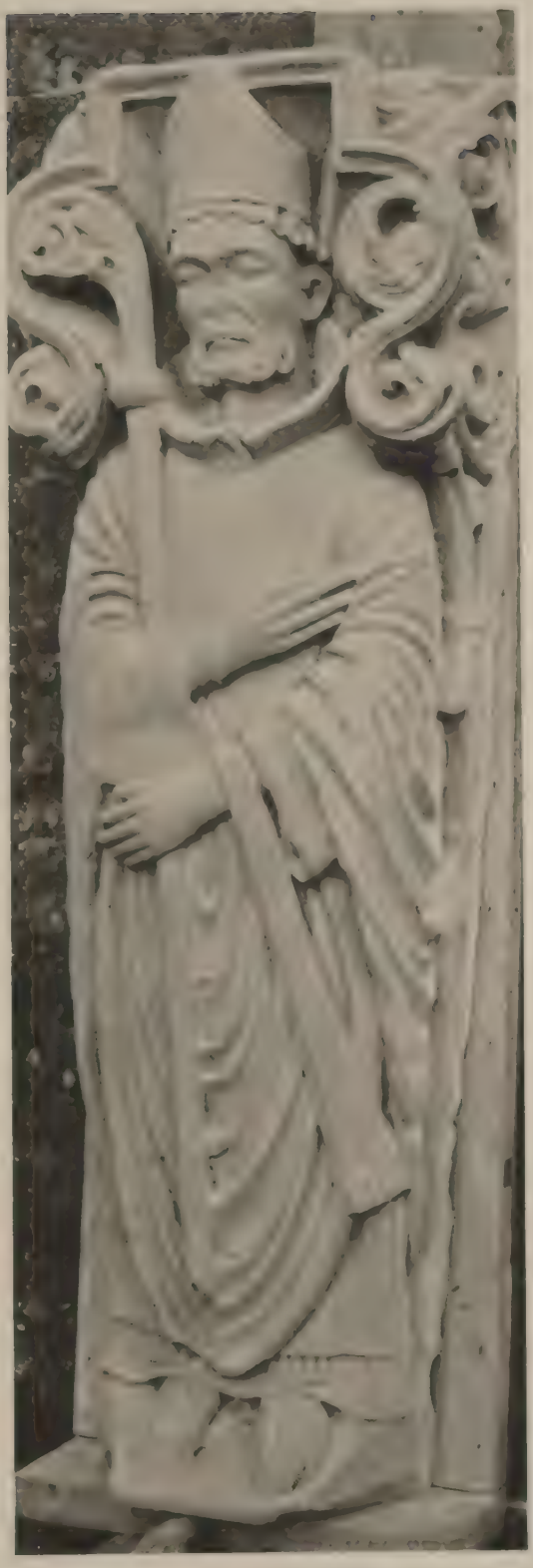


Fig. 2. Eilwin (997–999)

is represented in Plate XVII . . . . adjoining to which also is represented the upper end of another antient tomb, now standing in the south aile of the choir.' When we look at the plate, which is from a drawing by Cattermole, we naturally suppose that one of the Saxon tombs (possibly Dudoc's) had been moved to this place. But Britton's note is intended to correct the plate, into which his artist had for pictorial purposes inserted this 'antient tomb,' as indeed he has inserted part of another tomb in an unreal position in the same plate. A careful examination will show that he had sketched in at this point one of the three 'antient tombs' in the south aisle to which Britton has already referred in the text.

We go back a generation from Britton to Collinson's *History of Somerset*, which was published in 1791. Here we discover the source of some of Britton's statements.

> In the south wall of the north aile, against the back of the choir stalls, are four effigies of bishops vested in their pontificals, with mitres, two of them having their hands crossed, holding a crosier. The effigies are generally supposed to represent Bishops *Brithelm, Kineward, Alwyn,* and *Giso.*
>
> In the south aile at the back of the stalls are three similar effigies of Bishops in their pontifical robes, with mitres and maniples, and with their hands crossed in different directions. The lowest of these is for Bishop *Burwold*, the next for *Ethelwin*, and the last for *Brithwyn*. Near the last lies Bishop Button, the first of that name, who is represented by a figure on a marble stone . . . .
>
> Near the entrance into the Lady Chapel rests Bishop *Button* the second; and between that chapel and the high altar, lies (as it is supposed) Bishop *Dudoco*.[1]

This reference to Dudoc's tomb is curious. The statement appears to have no support from other writers. But Dudoc was supposed to be missing from the series of Saxon tombs in the aisles—though this supposition was, as we shall presently see, erroneous.

Our next witness is nearly two centuries earlier. Francis Godwin published his *Catalogue of the English Bishops* in 1601, when he was a canon of Wells but not yet Bishop of Llandaff.[2] From him we take the following extracts:—

> 9. *Burwold*. His toombe is to be seene with his name engraven upon the South side of the Quier at Wels.
>
> 14. *Dudoco* . . . was buried upon the South side of the high Aultar in Wels. It seemeth his toombe is the highest of those ancient monuments that we see upon the South outside of the Quier.
>
> 15. *Giso* . . . was buried upon the North side of that place where the high altar then stoode. I take his to be the highest of those old toombes that lye upon the outside of the quier toward the North.

[1] Collinson, III. 309 f. Collinson has assigned W. Button I's tomb to W. Button II, and *vice versa*.
[2] The Latin edition published in 1616 adds nothing of importance for our present inquiry.

This is scanty information. But it is something to be told that Burwold's name was still to be seen on his monument.

We get more satisfactory evidence as we go back yet further to Leland, who described the church in 1540.[1]

In Boreali Insula juxta Chorum.

Quatuor tumuli et Imagines Episcoporum Wellen. *quae referunt magnam vetustatem.*

In Meridionali Insula juxta Chorum.

Primus tumulus sic inscriptus est, BVRWOLDUS.

Quatuor tumuli Episcoporum Wellensium, *quorum tres imagines habent antiquitatem referentes. Quartus est* Gulielmi Bytton, *quem vulgus nuper pro Sancto coluit.*

Leland, therefore, saw seven ancient tombs, four in the north aisle, and three in the south. Burwold's name was inscribed on the westernmost in the south aisle. In line with the Saxon tombs in the south aisle, Leland found William Bitton II, the saint who cured the toothache.

It will be well at this point to indicate the position of the ancient tombs as they are shown in the plan of John Carter, and later in the plans found in Britton's *Wells Cathedral*, and Winkles's *Cathedrals of England and Wales* (1835); attaching to them the names given by the tradition of the end of the eighteenth century[2] (fig. 1 on next page and pl. XIII).

II. We must now start afresh from the state of the tombs in John Britton's time, and trace their more recent fortunes. The late Mr. John Clayton, an honoured name in ecclesiastical art, whose loss we have recently had to deplore, began his career by superintending the work carried out by Salvin at the time of the great alterations in the choir. His memory of those years was exceedingly fresh to the end of his life, and he wrote letters in reply to questions addressed to him by Canon Church in 1894; from these letters the following extracts are taken:— .

> On the stone bench behind the stalls, or rather the stone screens on which the old oaken stalls were placed, in the North aisle were the sculptured effigies of the early bishops.
>
> They did not rest on stone coffins in the ordinary sense of the term, but only on stones at sides, foot and head set upright for the purpose; the top of the bench forming the bottom of the receptacle.

[1] Leland's *Itinerary*, vol. iii. p. 107 (ed. 1744): p. 293 of Miss Toulmin Smith's ed.: I quote from the useful reprint of his notices of Somerset, in the *Som. Archaeol. Soc. Proceedings*, XXXIII, ii. 108 ff.

[2] It may be noted here that all these tombs were drawn by John Carter at the end of the eighteenth century. His sketches are preserved in the British Museum (Addit. MS. 29926).

Fig. 1. Effigy.

Fig. 2. Effigy.

Published by the Society of Antiquaries of London, 1914.

Enclosed within the stonework on which were the sculptured effigies were oaken boxes containing bones, and leaden tablets with the name of each bishop thereon inscribed. These monuments were opened in 1848, and were moved from the stone bench, where they then lay behind the thirteenth-century stalls, to their present positions.

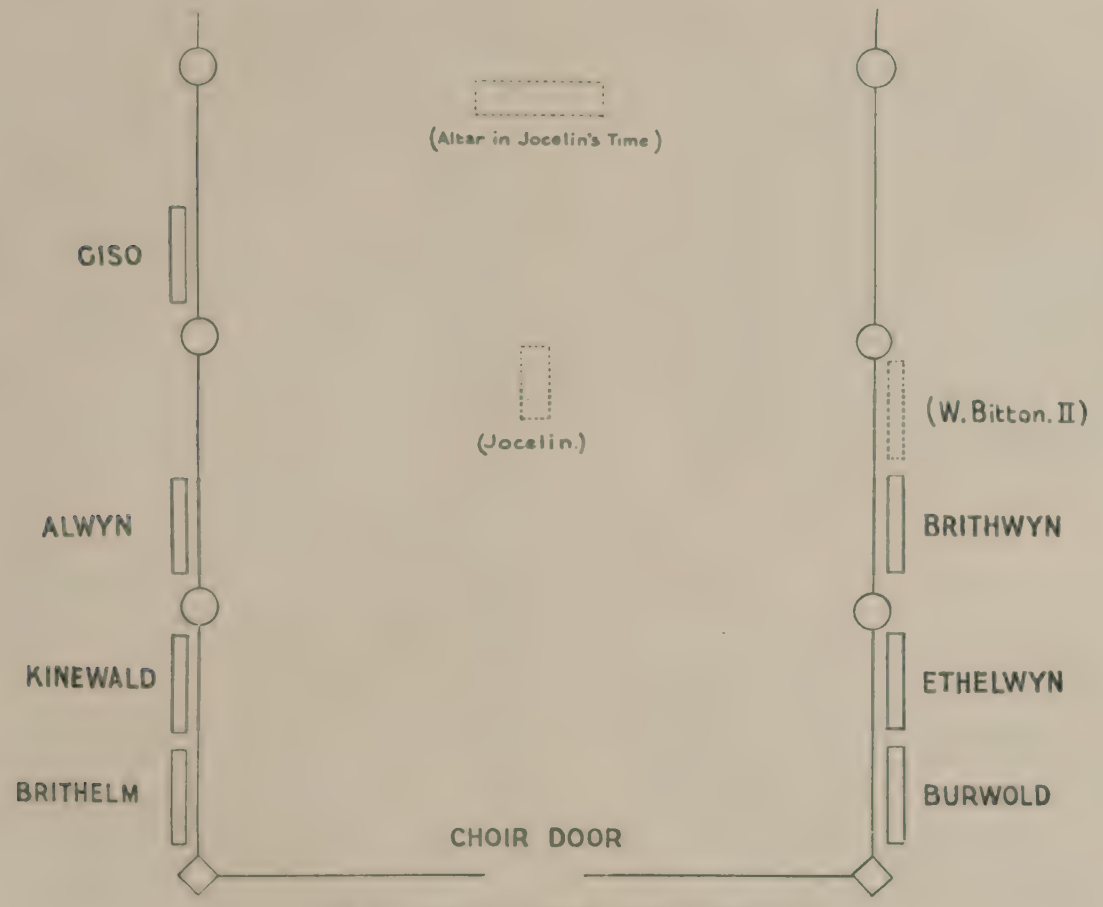


Fig. 1. Position of Tombs as shown by Carter, etc.

These boxes were neither long enough nor wide enough for a human body laid out at full length. There was obvious evidence that the boxes were of later, probably much later, date than that of the original interment: the bodies had evidently been disturbed, and put in their bony state somewhat indiscriminately into the boxes. In one or two instances they contained more than the remains of one person. I found portions of a second body (osteological) in certainly one box—I think two.

I do not think there was any such effigy or boxes found on the bench in the South aisle. Of this I am almost positive.

This is first-hand evidence of high importance, which but for this correspondence must have perished altogether. In the stone casings beneath the effigies were found on leaden tablets (pl. X, figs. 6-8) the names of EILWINVS, LEVERICVS, BVRHWOLDVS, DUDICO, and GISO. In the new positions chosen for them the upper slabs of the stone benches were partially cut away, and large receptacles were built of Bath stone, extending beyond the bench and coming down in front to the pavement. On the faces of these receptacles the lettering found on the tablets was carved.

GISO was placed three bays further east than before; namely, in the bay of the north aisle which is nearest to the high altar. Probably this was done with the idea of placing him in the same position relative to the later altar as that which he had occupied in relation to the old altar of the Saxon church. The effigy, which Britton saw over his tomb and thought could not be the effigy of a bishop, because it had a cap instead of a mitre, was assigned to another bishop, and Giso was given one of the effigies which had an unmistakable mitre.

EILWIN and LEVERIC were placed on the north bench at the far end of the north aisle, beyond the eastern transept. Over them were set the two effigies which had the low cap-shaped mitres.

BURHWOLD and DUDICO were placed on the south bench at the end of the south aisle.

Mr. Clayton's remark that there were no effigies in the south aisle, so far as he could remember, is puzzling: for the effigy set over Burhwold was certainly in the south aisle in Britton's time, and he commented on the 'plain knobbed staff', as he called it. But a possible explanation seems to be offered by an entry in the Fabric Record Book under the year 1872:

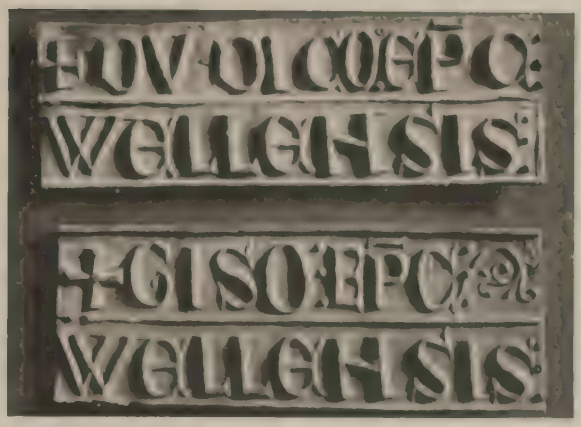
> Two effigies of Saxon Bishops (left in Crypt) placed in South Choir Aisle (their original position).

These two effigies were placed on the bench under the two westernmost arches, but on smaller stone bases, with stone supports coming down in front of the bench. The bones and tablets had evidently been lost, and so no names were inscribed upon the bases. These effigies had perhaps been moved before Mr. Clayton arrived on the scene. They went to the undercroft beneath the chapter-house, and were lost sight of.

III. We have already observed that two of the effigies (pl. XI) present certain features which distinguish them from the rest of the series. We must now note the principal points of difference in detail.

1. The lower part of the block of stone out of which each of these two images is cut is shaped into a rectangular slab, 6 ft. long and 1 ft. $10\frac{1}{2}$ in. wide. The other effigies have slabs which narrow towards the feet, and vary in length from

+SIBIRVS EPC
WELLENSIS


+OVOLOGEPC
WELLENSIS
+GISOEPC
WELLENSIS

+HILWIHVS EPC
WELLENSIS
+BVRLWOLVS EPC
WELLENSIS
LEVERICVS
CIVC WELLENS

6 ft. 1 in. to 6 ft. 6 in., and in breadth at the head from 1 ft. 11½ in. to 2 ft. 3 in., and at the feet from 1 ft. 5 in. to 1 ft. 8½ in.

2. The head rests on a plain cushion; whereas the other five lie in canopied niches, in the construction of which great variety is displayed.

3. The feet, now in each of the two figures broken off, had no support to protect them: a large fringe or string-like decoration flows over the edge of the slab below the place were the feet were; to a part of this ornamentation the bottom of the staff was attached. All the other effigies have the feet well protected by plain supports which are quite flat on their eastern surfaces.

4. The two figures are robed in plain large chasubles, the graceful folds of which are deeply cut: the dalmatic and the alb show beneath, but no stole: the maniple over the left arm is quite plain at the ends, and indeed is hardly distinguishable from the folds of the chasuble. One of the other figures (pl. X, fig. 5) shows no stole, and has a maniple with a very simple ornamentation: but the rest have fringes to both stole and maniple.

5. These two effigies appear to have had staves of wood: there are marks of attachment which show that they were held in the left hand: the right hand is laid high up on the breast. The other figures have staves cut in the stone, resting on the right shoulder; and the hands are laid over them upon the breast.

6. Lastly, whereas the other five figures have triangular mitres, with a broad plain band round the bottom and another up the middle to the peak, these two have mitres much lower, with rounded points before and behind. The strings of the mitre are also quite plain: whereas the other five figures either show no strings at all or have strings with fringed ends.

IV. We have now collected all the information that was available up to the summer of 1913, when the installation of a heating apparatus called attention to the unsuitable positions which had been chosen in 1848 for most of the effigies, and gave an opportunity for putting them back, on less incongruous bases, as nearly as possible where they had lain during the five preceding centuries.

When the effigies were lifted, the leaden tablets spoken of by Mr. Clayton were found with the bones, which in most instances were in boxes of elm wood newly made in 1848, but in one or two instances in cavities left in the masonry: there were small fragments also of the original oaken boxes, very much decayed. In Giso's tomb there was a rudely-shaped cross of lead (pl. XII, fig. 12), and fragments of a red stuff in which the bones had once been wrapped. When the effigy assigned to Dudoc was removed, a box was disclosed which contained what appeared to be a complete skeleton, but with it was a tablet bearing *Sigar's* name. In a recess in the masonry nearer the wall was a skull with a number of bones and the tablet of Dudoc. Each of these receptacles contained small portions of the

same red stuff which had been used as a wrapping. This tomb had yet another surprise to offer: for when the masonry constructed in 1848 was taken to pieces, a large stone was found embedded in it, which bore the letters OLD, with parts of a letter before and after (pl. XII, fig. 13). It was obvious that this was a portion of the name BVRWOLDVS, which Leland had seen inscribed on one of the tombs. As the letters are three inches in height and deeply cut, it is strange that Britton should speak of this inscription as if he had only heard of it, but had not himself seen it.

V. It is of some historical interest to consider the local tradition of the successions to the See of Wells, and to compare it with the tradition presented to us by the great chroniclers of the early part of the twelfth century. Our earliest Wells list is found in a brief history of the See, written probably by a canon of Wells about the year 1175. This history is preserved in the Bath chartulary now in the Library of Lincoln's Inn: it was carefully printed in 1840 by Joseph Hunter for the Camden Society in a small volume entitled *Ecclesiastical Documents*. In addition to some legendary matter, it contains a document written by Bishop Giso, which is of first-rate importance for his own period and for that of Bishop Dudoc his immediate predecessor. This earliest history is called by modern writers the *Historiola*, that name having been given to it by its editor to distinguish it from the *Historia Minor* and the *Historia Major* of Wharton's *Anglia Sacra*.

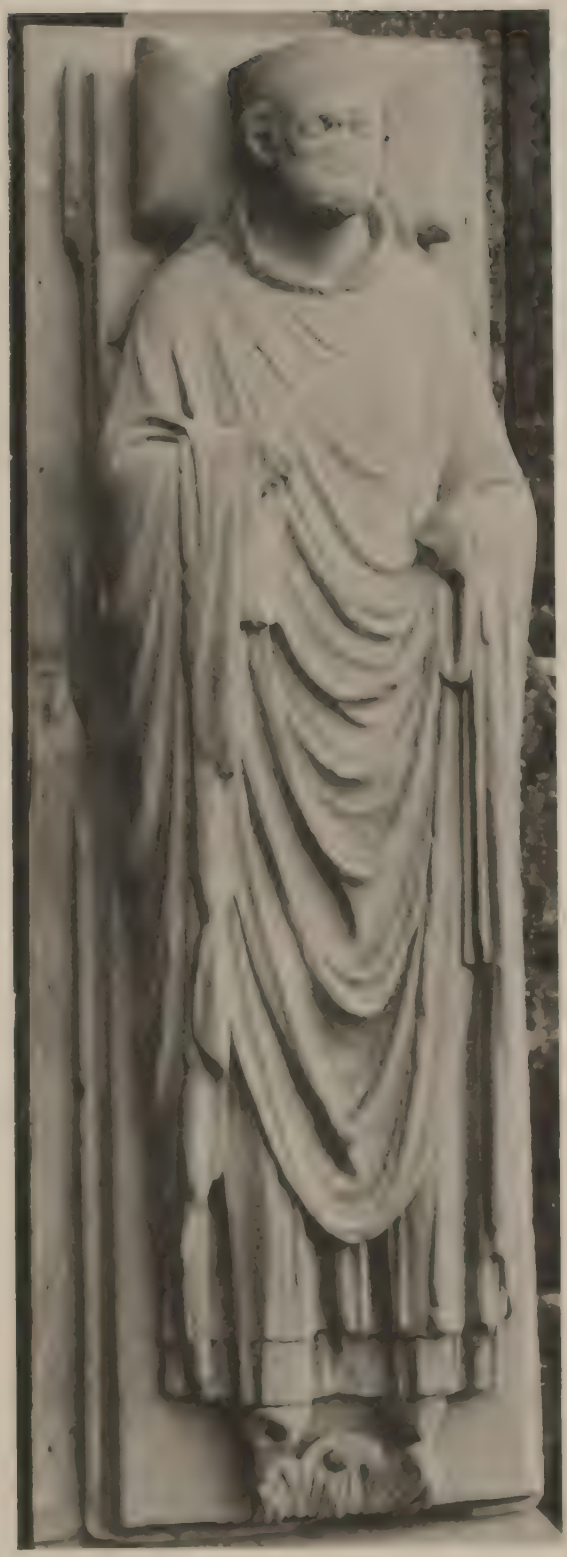
The passage with which we are concerned is brief, and may be quoted in full. After speaking of Daniel, a mythical bishop who is supposed to have moved his seat from Congresbury to Wells in King Ina's time, the writer proceeds:—

> Cui successerunt plurimi successores in Wella, pontifices subscripti SIGARUS, ALWYNUS, qui subplantavit Sigarum ab episcopo;[1] post cujus obitum cum xiij^{cim} diebus vixisset episcopus exspiravit; BRITHELMUS, BURTHWOLDUS, LIOWYNGUS, BRITHTUMUS, ELWYNUS; quibus successerunt BRITHWYNUS et DUDUCO vir justus et timoratus; de quibus scripsit successor eorum, venerabilis et praeclarae memoriae GYSO episcopus.

We may add here that Giso, in the document which immediately follows, refers only to two of his predecessors, 'Brytheri .... Merechyyt cognominatus' and Duduco. The former, he says, was buried at Glastonbury.

This local tradition is reproduced in the so-called *Historia Minor*, found in the Wells *Liber Albus II* (f. 290), a document beginning 'Nomina episcoporum' and written about 1370. The passage is worth quoting, because its variations in spelling suggest that the writer used a copy of the *Historiola* which differed from that in the Bath chartulary.

[1] Hunter reads *episcopatu*; but the MS. has 'Œpo'.



Cui [sc. Daniel] successit SIGARUS episcopus, quem supplantavit ALWYNUS; post cujus obitum vixit idem Alwynus xiij diebus: cui successerunt BRITELLINUS, BURWOLDUS, LEOVINGUS, BRIDELWYNUS, ALWYNUS, BRITELWYNUS, MERELWIT et DUDOCO nacione saxo .... cui successit Gyso.

It will be seen that he has inserted Merewit, but has not identified him with Britelwynus. We must read, for the third bishop, *Brithelmus* with the Bath chartulary, not *Britellinus*. But on the other hand it is clear that *Brihtumus* of the Bath chartulary should be *Brithuinus*: also its *Burthwoldus* is less correct than *Burwoldus*.

We see, then, that the Wells tradition of the episcopate remained unaltered for two centuries, from 1175 to 1370; and that its list of historical names began with Sigar. This receives a remarkable confirmation from the series of ancient episcopal effigies preserved in the cathedral church. Seven of these effigies still remain; and there are six leaden tablets bearing the names of bishops. The two lists are as follows:—

Historiola	*Leaden tablets*
Sigarus	SIGARVS
Alwynus	EILWINVS
Brithelmus	
Burthwoldus	BVRHWOLDVS
Liowyngus	*LEVERICVS*
Brithuinus	
Elwynus	
Brithwynus [=Merechyyt]	
Duduco	DUDICO
Gyso	GISO

Of the tablets one presents an obvious difficulty. *Levericus* may be a latinization of Leofric, but not of Living. Moreover, Living was translated to Canterbury; though the Wells tradition says nothing of this, and possibly he was thought to have been buried at Wells. Now it is most interesting to observe that whereas all the other tablets are of the same date, and in parts actually from the same mould, Levericus is lettered in a later and more artistic style: the tablet is smaller, and of one piece, whereas the others are of two or more pieces soldered together; and it is made of a whiter lead or of some alloy. We may suppose that a tablet had been lost or injured, and that this was made as a substitute at the removal in 1325. If so, we might imagine that a mistake has crept in, and that 'Levericus' does not accurately represent the original name. Apart from this, the tablets harmonize completely with the written Wells tradition.[1]

[1] It is of interest to observe that the Hyde *Liber Vitae* edited by W. de G. Birch for the Hampshire Record Society in 1892, which contains lists of bishops which are clearly intended to be complete,

We have next to note that the Wells local tradition (*valeat quantum*) is entirely independent of the generally accepted tradition of the Wells episcopate, as represented, for example, by Florence of Worcester (1117) and William of Malmesbury (1125). This accepted tradition has been sanctioned for us by our great authorities Wharton and Stubbs, the latter having tested it so far as was possible by the Saxon charters.

Now it is important for the later history of our effigies to observe that this tradition began to oust the local tradition at Wells early in the fifteenth century. It is found in what is called the *Historia Major*, preserved in the Wells *Liber Albus II* (f. 297 ff.). This document was composed by a canon of Wells about the year 1410. The writer is confessedly influenced by William of Malmesbury, and gives us his entire list from Athelm to Giso, with the single addition of the name of Burwold. He admits indeed that he can find no mention of Burwold in William of Malmesbury's book on the bishops, nor in that on the kings: but he says that Burwold occurs in the Wells *Martilogium*, and that a tomb in the church is inscribed with his name.

William of Malmesbury's list, which here follows, is the same save in matters of spelling with that appended to the Chronicle of Florence of Worcester.[1] [The *Historia Major* inserts Burwold before Living.] The dates of accession here appended are those of Stubbs's *Registrum*.

Athelm	909
Wlfelm	914
Elfeh	923
Wlfelm	938
Brihtelm	956
Kineward	973
Sigar	975
Elwine	997
[*Burwold*]	
Living qui et Elstan	999
Ethelwin	1013
Brihtwin	
Merewit qui et Brihtuui	1027
Dudeca	1033
Giso	1061

agrees with the Wells tradition in making Sigar the first bishop of Wells. The list, which belongs to a portion of the manuscript written *c.* 1020–1030, is as follows: 'i. Sigar, ii. Byrhthelm, iii. Cyneþerd, iiii. Cynsige, v. Ælfþine, vi. Byrhtþig. I have also since found that the Anglo-Saxon Gospels written at Bath Abbey, *c.* 1090 (C.C.C. Camb. 140), has a list of bishops of Wells beginning with Sigarus, and closely corresponding with that of the *Historiola*.

[1] As edited by Thorpe: but the best manuscript of Florence (C.C.C. Camb. 92) omits 'Merewit qui et Brihtuui', reading 'Byrhwinus, Byrhtwinus'.

A glance at the diagram on p. 99 will show that in process of time the names of our ancient effigies were to some extent changed to bring them into line with the accepted tradition. The questionable *Levericus* disappeared; but so also did the unquestionable *Sigar*. On the other hand, *Kineward*, Sigar's predecessor, unknown to the local tradition, came in; as also *Ethelwyn*, the twice-ejected ex-abbot of Evesham. *Brithelm* or *Brithwyn* may have been in already—for one tablet has been lost. This gives us the list which we find in Collinson. It was current, he tells us, in his day: we have nothing to indicate the date at which the modifications were introduced.[1]

It is for those who are conversant with the history of the Saxon Church to judge whether any value can properly be assigned to the local tradition where it differs from the generally accepted tradition. It is indeed hard to dismiss Burwold as a mere fiction, however content we may be to explain away 'Levericus'. It is worth while to mention that the Cornwall succession has: *Burwold, c.* 1018; *Lyfing*, 1027–1038; *Leofric*, 1046–1072 (see further below VI. 3).

VI. Up to this point we have been concerned only with collecting facts, and we have abstained as far as possible from conjectures of any kind. But we cannot leave wholly untouched the interesting questions which our record of the facts does not suffice to determine. What is the probable date of the effigies, and more especially of the two with the low Saxon mitres? What motive can be assigned for so remarkable a commemoration of the bishops of bygone days? How are we to account for the list of names thus commemorated, and its discrepancy from the Wells succession as generally recognized by Church historians? These questions open out lines of most attractive inquiry. The progress of monumental statuary in England, palaeography as affected by the particular material used for the formation of letters, the relation of the Anglo-Norman to the Saxon Church, the dim history of the Church in the west in the dreadful period of the Danish invasions, the value of the episcopal lists which scholars drew up fifty years after the Conquest, and the genuineness or fictitiousness of the Saxon charters by which we try to check them—all these topics are suggested by our particular investigation; and the bare mention of them reminds us how much work still calls to be done. The most that can be attempted here is to offer a few tentative replies and submit them with due deference to the criticism of those who have made special studies in any of these directions.

1. We begin, then, by seeking the probable dates of our two distinct groups of effigies. Before we approach the evidence of art or palaeography, it is essential that we should have in our minds a general outline of the history of the church for the adornment of which they were made. Bishop Giso, a Lotharingian

[1] Neither Leland nor Godwin names any effigy save that of Burwold: Godwin merely conjectured that Dudoc and Giso were the easternmost on either side.

brought over by Edward the Confessor, held the see of Somerset during the whole of the Conqueror's reign. He was an ecclesiastical reformer and brought his canons under a semi-monastic rule after the fashion of his own country, building them a dormitory, cloister, and refectory: but he does not appear to have undertaken the rebuilding of his church. John, the next bishop, in accordance with the Norman policy which was moving the bishopries to the larger towns, transferred his seat to the Abbey of Bath. Giso's institution collapsed; even the buildings which he had erected were demolished, and the Chapter of Wells suffered eclipse for the next half century. Then came Bishop Robert, who reformed the Chapter on the new Sarum model, constituting a dean and other dignitaries, and founding prebends for the canons. Something he must have done for the church itself, for he consecrated it afresh about 1147. But of the church of his day we can only identify a single detached stone, once part of the base of a Norman pier. After Robert's death the diocese was without a bishop for seven or eight years. Bishop Reginald, who was consecrated in 1174, was a man of large aims and of wide continental experience. He was familiar with the great churches which were rising in the later style in Normandy and in France. The canons of Wells had so far recovered their status as to share in his election with the monks of Bath; and Reginald carried on Robert's work in securing them further endowments. The researches of Canon Church have shown for the first time that Reginald inaugurated the building of a new church at Wells, and the evidence which he has produced admits of being yet further strengthened. He died in 1191, a month after his election to the see of Canterbury. It is reasonable to think that the eastern portion of the church was in use before the end of the century.[1] This included a presbytery of three bays, with aisles and an ambulatory. Bishop Jocelin, the next great builder, was consecrated in 1206, and in spite of the Interdict he remained in England until the personal excommunication of King John at the end of 1209. He was back again from his exile in 1213, and he lived on until 1242. He completed the church which Reginald had begun and adorned it with the splendour of its western front.

This is the church which we see to-day, with one important exception—namely, the extension of its eastern portion in the early part of the fourteenth century. Three more bays were built to form a new presbytery, and the three original bays received the choir, into which new stalls were beginning to be placed in the winter of 1325. It was at the back of these stalls that the monuments of the Saxon bishops were placed, and there they remained, as we have seen, till the destruction of the stalls in 1848.

[1] I have adopted here the view which now prevails as to the date of the eastern portion of the church. It is consistent with such evidence as we have from the documents; but I could wish that the architectural evidence might be more thoroughly investigated.

Fig. 11. Glass bowl fragment.

Fig. 12. Mortuary crucible from Coed-y-bont.

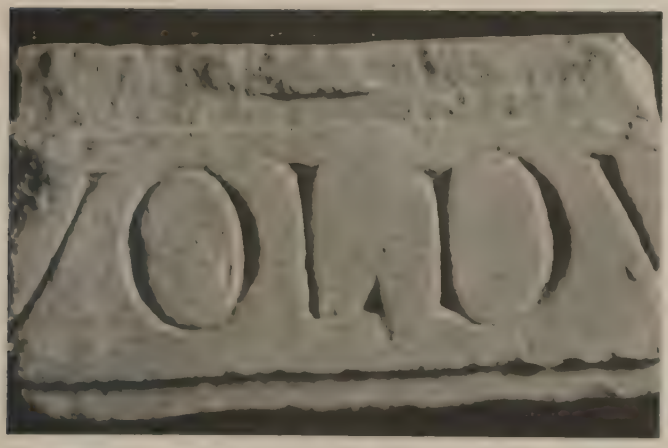


Fig. 13. Stone with inscription [illegible].

Fig. [illegible] Fragment of stone cross.

It would be unreasonable to suppose that the inconspicuous position thus assigned to them was that for which they had originally been made. Indeed, it is not likely that any one will be found to suggest that even the latest of our effigies was carved in the fourteenth century. We may fairly regard the series as part of the scheme for the decoration of the earlier presbytery. The stone casings enclosing the remains of the bishops and surmounted by their effigies would stand on the low wall dividing the presbytery from the aisle. Dudoc and Giso would lie south and north of the altar, as they had lain in the Saxon church. When the custom which had prevailed for more than a hundred years was broken at last, and Bishop Joscelin came to be buried at Wells, and not like all his Anglo-Norman predecessors at Bath, his grave was made in front of the high altar, and in the very centre of the presbytery: so that he lay with the Saxon bishops around him.

We may hope for some light on the date of the completion of the series from the lettering of the leaden tablets which give the bishops' names (pl. X, figs. 6–8). One of these is obviously later than the rest, and may well belong to the period of rearrangement of the tombs in 1325. The other five which are preserved were all made at one time. They are composed of two strips of lead soldered together. The reason for this was economy of labour. The word WELLENSIS on each tablet was cast in the same mould, and occupied the lower strip. But some of the bishops had names which were inconveniently long. A little patching got over the difficulty. Thus BYRWOLDVS filled about the same space as WELLENSIS, and left no room in the upper line for EPC. So these three letters were cast separately and added to the line, and a blank piece to go beneath them was somewhat clumsily contrived by obliterating the lettering of a similar cast of EP̄C: part of the P̄ still remains, turned upside down.

Two features may help us to give a date to this lettering. The early form of N is to be seen on Bishop Reginald's seal, but not on the seals of his successors. And, again, the use of EPC instead of EPS is found occasionally in Wells documents of the end of the twelfth and the beginning of the thirteenth century. To decide the limits of time within which these features would be likely to occur would require a special investigation. All that we can say at present is that they harmonize with the supposition that the series was completed in the early part of the thirteenth century.

We must now consider the effigies themselves, and ask which of the two groups into which they fall is to be pronounced the earlier. The two figures with the low mitres (pl. XI, figs. 9, 10) certainly present the more primitive appearance. We have already noted the loss of the feet of both of these images. One, indeed, has lost a foot more than once, as is shown by a dowel mark on the stump, which tells of an early mending. If the mistake of leaving the feet unpro-

tected suggests the inexperience of early craftsmen, yet more significant of antiquity are the very low Saxon mitres. The native shape was quickly banished by the triangular Norman mitre, and we do not expect to find its reappearance in art.[1] It is true that there is an antiquarian touch in the mitres of St. Oswald and St. Wulstan, who lie on either side of King John on his monument in the choir of Worcester. It may be that those figures were partially copied from earlier statues preserved in the church. Yet even there the form is intermediate—perhaps an intentional compromise.[2]

Other features which seem to confirm the view that these two figures are earlier than the rest are the plain ends of the maniple and of the mitre-strings, and the absence of the fringed ends of the stole which the other effigies display. It is hard to resist the impression of higher antiquity which the general simplicity of the habiliments of these two effigies makes upon us, when we compare them with the more elaborate dresses of the other five.

But against this impression we have to set the evidence derived from the general style of the carving. Unquestionably these two figures represent a higher form of artistic treatment. The long straight lines and sharp edges of the folds of the drapery, together with the smaller proportion of the head to the whole figure, witness to a development of the sculptor's art. To this must be added the higher relief of the figure, which is no longer half-embedded in the block out of which it is cut. Moreover, the pillow on which the head rests is an improvement on the canopied niche which in various forms is so striking a feature of the other group. Once more the wooden staves which these two figures formerly held find a counterpart in the statues on the west front, where also the wood has long perished away.

We cannot resist this evidence; and we may accept the verdict of those authorities who would assign the five effigies to the first or second decade of the thirteenth century, and the two others to about the year 1230. The art of statuary was making rapid strides at this period, and an interval of ten or twenty years might suffice for the development which we have here recognized.[3]

[1] The mitre on the bishop's head in the north porch at Wells is somewhat low, but this is sufficiently accounted for by the exigency of its position. It does not at all resemble the two mitres in question.

[2] Since this paper was read, and in consequence of the discussion which followed it, I have carefully measured and compared the mitres of both the Wells figures. In each of them the back of the mitre, which is not separated from the slab beneath, is preserved intact; but the top of the front has suffered damage from standing out unprotected, like the feet. I now think it certain that about an inch has been broken off at the top. At present the lowest part (at the side) is $2\frac{1}{4}$ in., and the highest (in front) only $2\frac{3}{4}$ in. Yet even when we have conjecturally raised the difference from half an inch to an inch and a half, these mitres still remain quite extraordinarily low.

[3] I have sought in the above statement to convey the impression produced on my mind by the

But how are we to account for the fact that two figures of the series are of a different date from the other five, and the yet more curious fact that the two which have the more primitive dress are shown by the style of their workmanship to be later instead of earlier than the rest? We can but make a guess. It is just possible that Bishops Dudoc and Giso, whose tombs were on the south and north of the altar in the older church, were already commemorated by monuments, which in the first instance were held to suffice; but that after the new effigies had been made for their predecessors, these antique monuments no longer seemed worthy members of the series, especially as they occupied the places of highest honour next the altar. Then, we may suppose, new effigies were carved for them, and the low Saxon mitres were copied from the figures on the original tombs.

2. Our next question is, What was the motive of this remarkable commemoration of the early bishops of Wells? A later parallel on a larger scale is offered by the series of sixteen effigies of kings and queens which St. Louis caused to be made in 1264 for the reconstructed church of St. Denys. But Anglo-Norman ecclesiastics were not accustomed to pay much respect to their Saxon predecessors. With haughty disdain they dismissed them as unlettered barbarians, partly because they could not read their Chronicles and Homilies. The one thing about them which they could not afford to despise was their unrivalled skill in working metals.

At Wells, however, there was a special reason for recalling the past. No other diocese had retained its old cathedral when the bishop had founded a new one elsewhere. Wells had indeed suffered sadly by the change. The bishops were now bishops of Bath, and were buried at Bath. The canons of Wells had a long struggle with the monks of Bath over the question of precedence and the more vital question of the right to elect the bishop. Whether at any time they had failed to make good their claim we do not know, but they certainly took their share in electing Bishop Reginald,[1] and a final settlement was reached after Bishop Jocelin's death. Roger, the successor of Jocelin, was compelled by the Pope to assume the double title of bishop of Bath and Wells. We can understand, then, that the canons had a good reason for surrounding their presbytery with the monuments of the bishops of Wells. If the monks of Bath could show

discussion which followed the reading of this paper. I owe a great debt to the criticisms offered by Professor Lethaby, Mr. St. John Hope, and Mr. Gardner, which led me to abandon my original view that the two effigies with the low mitres were the earliest of the series. I have also learned much from the section on the Wells statues in *Medieval Figure-Sculpture in England* (Prior and Gardner), pp. 296 ff., which I had not seen when I wrote my paper.

[1] They admitted that the monks of Bath had elected Reginald's successor, Savary, without their concurrence; but they denounced this as a disgraceful trick.

four bishops' tombs at the beginning of the thirteenth century, the canons of Wells should show seven. Thus the motive of this unique commemoration is found in an exceptional controversy, and a fresh reason is forthcoming for placing the series in the early years of the thirteenth century.

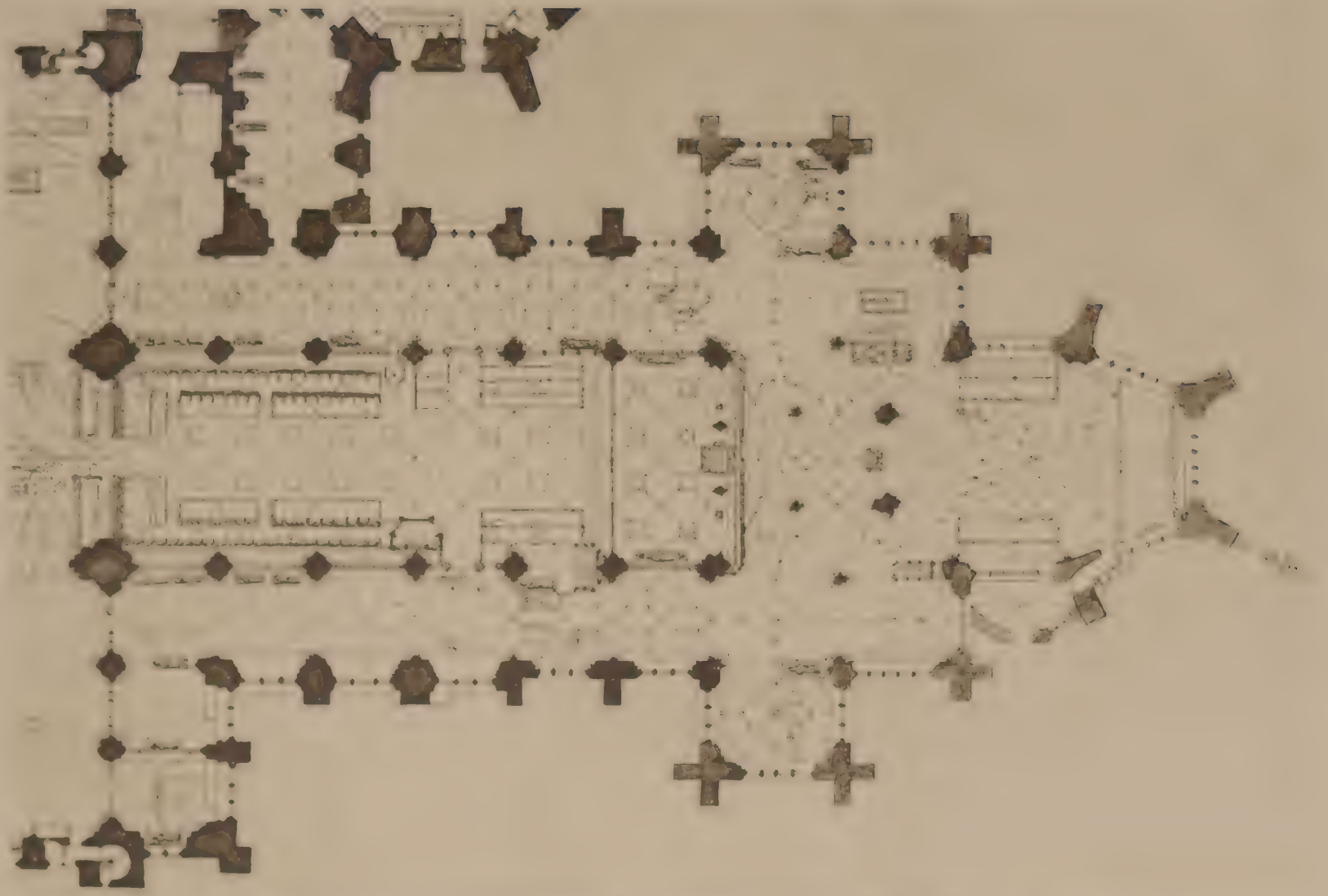
3. There is still a word to be said as to the names chosen for commemoration. We have shown already that they correspond somewhat closely with the list found in the *Historiola*, which was written about the year 1175. But what was the source of the tradition? In the first place, it is probable enough that the Saxon church contained other episcopal tombs besides those of Dudoc and Giso: and that is the natural explanation of the bones which are still preserved. Moreover, the names of the bishops would be, to some extent at least, recorded in the Martyrology of the church. We are definitely told at a later period that Bishop Burwold was there commemorated. The Martyrology would give the day, but not the year, of the bishop's death; and so the names might be correctly handed down, but the order of succession might not be certainly known. This accords with the fact that the traditional order given by the *Historiola* places Bishop Brihthelm much too late.

The Martyrology may give us also a possible explanation of the inclusion in the series of Bishops Burwold and 'Levericus'. For 'Burwold bishop' may have stood as an entry in the Wells Martyrology, and yet Burwold may not have been bishop of Wells. He might conceivably be the Brihtwold, Bishop of Wilts, whose episcopate of fifty years ended in 1045, and who was famous for the vision of St. Peter crowning the future King Edward, which he saw at Glastonbury, while as yet Cnut was on the throne; or he might be the Brihtwold, Bishop of Cornwall, more commonly written as Burhwold, whose diocese was joined after his death in 1027 to the diocese of Devon under Bishop Living. Similarly, the famous Leofric of Exeter may have stood as 'Leofric bishop' in the Wells Martyrology, and a hundred years after his death might have been included by mistake among the ancient bishops of Wells.[1]

VII. In a few closing sentences we may sum up what appears to be the probable history of these effigies.

1. In the Saxon church at Wells Bishop Dudoc (†1060) was buried on the south side of the high altar, and Bishop Giso (†1088) on the north. Elsewhere in the church were the graves of some of their predecessors. But after them for more than a hundred years the resting-place of the bishops was at Bath.

[1] As an example of the way in which confusion of this kind might arise, we may note that in the ancient (Glastonbury) Calendar bound up with the Leofric Missal we find, inserted apparently by the same hand, at Nov. 9, 'Obitus eadulfi episc.,' and at Aug. 29, 'Obitus ælfwini episc.' The former was the first bishop of Crediton (†934); the latter was bishop of Wells (†998).



GROUND PLAN OF THE EASTERN END OF WELLS CATHEDRAL CHURCH

(From the plan by John Carter in the possession of the Society of Antiquaries)

Scale 24 feet to 1 inch

Published by the Society of Antiquaries of London, 1914

2. The eastern portion of Bishop Reginald's new church was probably finished before the close of the twelfth century. The graves of the bishops had of necessity been disturbed, and it was determined to place a series of commemorative effigies over the receptacles into which their remains were collected. The old monuments of Dudoc and Giso were at first retained; five new figures were made, and the whole series of seven was arranged under the two easternmost arches on both sides of the new presbytery. Shortly afterwards two new images were made for Dudoc and Giso.

3. Then in 1242 Bishop Jocelin was buried in the midst of the presbytery, the sides of which were occupied already by his Saxon predecessors. Roger, his successor, was buried at Bath. Then William Bitton I was laid in the midst of the new Lady Chapel, east of the presbytery. Walter Giffard, his successor, was translated to York. William Bitton II, 'the saint', who died in 1274, was buried parallel with Jocelin, between the pillars on the south side of the presbytery: his gravestone with incised effigy still remains, in line with the Saxon bishops. Subsequent bishops were laid in other parts of the church.

4. Early in the fourteenth century three bays were added to form a new presbytery, and the old presbytery became the choir. The effigies were now rearranged behind the new stalls, two on each side being moved westward to the westernmost bay which may have formerly contained the doors of the presbytery. At the time of this removal a new tablet was made for 'Leverieus'.

5. The effigies remained thus for the next five hundred years. But in 1848 the old choir stalls were destroyed, and new stalls of stone were erected. As these were set back between the pillars, the remaining portion of the wall or bench was not wide enough to support the old monuments. Four of them were moved to distant parts of the north and south aisles. Giso was placed three bays east of his old position, and one of the effigies with a high mitre was set over him. The old stone casings were destroyed. The other two effigies seem to have gone to the undercroft of the chapter-house, from which they were brought back to the south aisle in 1872.

6. Lastly, in 1913 the remains and the leaden tablets have been put into new boxes, enclosed in plain casings of Doulting stone; and they have been replaced as nearly as could be done in the positions which they occupied from 1325 to 1848. An exception had to be made for Dudoc and Giso; but with the result that they now lie, as at the first, south and north of the high altar. Giso has regained the effigy with a low mitre which Britton described as over his tomb, and the companion effigy covers the remains of Dudoc.

Note on some of the Illustrations.

1 (Pl. XII, fig. 124). The cross found with Bishop Giso's bones, and replaced as before, is about

4 in. in height. It may be compared with a cross in the possession of the Society of Antiquaries, which came from Bury St. Edmunds.

2. (Pl. X, fig. 8.) The leaden tablet of EILWINVS is $5\frac{3}{4}$ in. in length; that of LEVERICVS is $4\frac{3}{4}$ in. The size of the other tablets may be judged by that of EILWINVS, which is of the same character.

3. (Pl. XII, fig. 11.) The second and smaller photograph of one of the figures with a low mitre is intended to show the shape of the mitre from another point of view.

4. (Pl. XII, fig. 14.) The fragment of a Saxon cross was found on the site of the former Lady Chapel near the cloister. It was described by Canon (now Bishop) G. F. Browne in *Somerset Archaeological Proceedings*, vol. xxxvi, part ii, p. 70. He says: 'Dragonesque ornamentation of the surface is a leading feature in the Saxon sculpture of Wessex, and the Wells fragment is probably an additional example of the prevailing characteristic of the local school of art. The dragon has, as is usually the case, been drawn in the form of a figure of eight, or with some more complicated convolutions; and the body has been intersected by interlacing bands, all of which show complete regularity of alternate "under and over" design.'

CHEST-FRONT REPRESENTING THE BATTLE OF COURTRAI

Warden's Lodgings, New College, Oxford, early fourteenth century

Published by the Society of Antiquaries of London, 1914

III.—*A Carved Flemish Chest at New College, Oxford.* By CHARLES FFOULKES, *Esq., B.Litt. Oxon., F.S.A.*

Read 19th March, 1914.

THIS carving has been photographed and cast by the courtesy of the Warden of New College, into whose possession it came some years ago from a tenant of the college, Mr. William Harris, of Stanton St. John, Oxfordshire. His family had been college tenants for many years, the names of members being found in the parish registers as early as the year 1667. There is no record to show how it came into the possession of the Harris family, but it was certainly in their farm-house over sixty years ago.

The workmanship displayed, together with the knowledge shown of local armorials and weapons, is undoubtedly Flemish, of the early years of the fourteenth century. The front is made up of two boards joined horizontally in two places, and measures in its present condition 39½ in. by 28 in. The chest of which it forms the front is of the corn-bin type, the sides being nailed to the outside of the ends of the carved portion, which must have been originally longer, for certain interesting details on each side appear to have been cut off. It is possible that while still in its original state it was used to hold corn, but owing to the depredations of rats was cut and remade as it is at present.[1]

There are certain details which prove without a doubt that the carver was a Fleming and that he produced his work very shortly after the incidents depicted took place, and it seems probable from the prominence given to the banner of the Guild of Carpenters that he was a member of this guild. The scenes represented are incidents connected with the battle of Courtrai, fought between the French and the Flemings on July 11, 1302.

In the year 1299 Philip le Bel of France pronounced the confiscation of Flanders, and proclaimed himself lord and master of Bruges. Outraged at this high-handed proceeding, the Flemings rose, but without much success, as town after town opened its gates to the French.

Appeals were made to England, and Edward I endeavoured to bring about

[1] Casts of the carving have been made by Mr. Young, of the Ashmolean Museum, Oxford, and have been acquired by the Victoria and Albert, Edinburgh, Glasgow, Courtrai, Ghent, and Brussels (Porte de Hal) Museums.

a meeting between Gui de Dampierre, Count of Flanders,[1] and the King of France. As a result of this an armistice of two years was agreed upon, while the whole question was submitted to the Pope for arbitration. The decision was favourable to Flanders, and the French king, enraged at this slight, tore up the Papal letter, broke off the armistice, and in the year 1300 sent his brother, Charles of Valois, to recommence the war. In vain the aged Gui de Dampierre had journeyed to Paris to intercede for his country, for he was seized on his arrival and, with his two sons and fifty Flemish knights, imprisoned at Compiègne.

The French king, thinking that by this means he had overcome all resistance, made a progress through Flanders with his queen, enacting irritating laws and insulting the burghers and their womenfolk. On the occasion of the royal visit to Bruges a heavy tax was imposed on the inhabitants, and this was the last straw to the already overburdened citizens.

As is almost invariably the case in times of national peril, the occasion produced the man, and at this critical moment in the history of Flanders the saviour arose in the person of Pierre Coninc, called by the French chroniclers Pierre le Roi,[2] a weaver of Bruges, who with Jean Breydel, Dean of the Guild of Butchers, raised the standard of revolt. At his call the Flemings rose, seized the castle of Malle, decapitated the governor, and on May 18, 1302, massacred the French garrison of Bruges, a vengeance which lives to-day in Flemish history as 'Les Mattines Brugeoises'. The pass-word was 'Schilt en Vriendt', and all those who could not pronounce the words correctly were deemed to be enemies, and were slaughtered without mercy. So great was the massacre that it took three days to carry the corpses outside the walls and bury them in ditches. Thereupon began a savage campaign, and the Queen of France herself ordered that neither man, woman, nor child should be spared.

On June 23, 1302, Gui de Namur, son of the imprisoned Gui de Dampierre, laid siege to the castle of Courtrai, destroying all the bridges over the Lys and the Groeninghe; and Robert d'Artois, the French leader, with an army of 50,000 men, marched to relieve the garrison, and drew up his forces to the east of the town. The advance was made in the night, guided by a traitorous Fleming, Guillaume de Moscher, resident in Courtrai, who had been fined for some offence by Gui de Dampierre, and thus revenged himself.

The Flemings, mostly infantry, about 7,400 strong, under the leadership of Gui de Namur and Guillaume de Juliers, grandson of Gui de Dampierre,[3] were

[1] Son of Guillaume de Dampierre and Margaret of Flanders, and grandson of Baldwin IX of Constantinople.

[2] Coninc or Conink, König, le Roi.

[3] Son of Guillaume de Juliers and Marie, daughter of Gui de Dampierre and Matilda de Béthune. De Juliers was Bishop and Provost of Maestricht; he is said to have used at this battle the sword left by his grandfather when he was imprisoned by Philip in 1300.

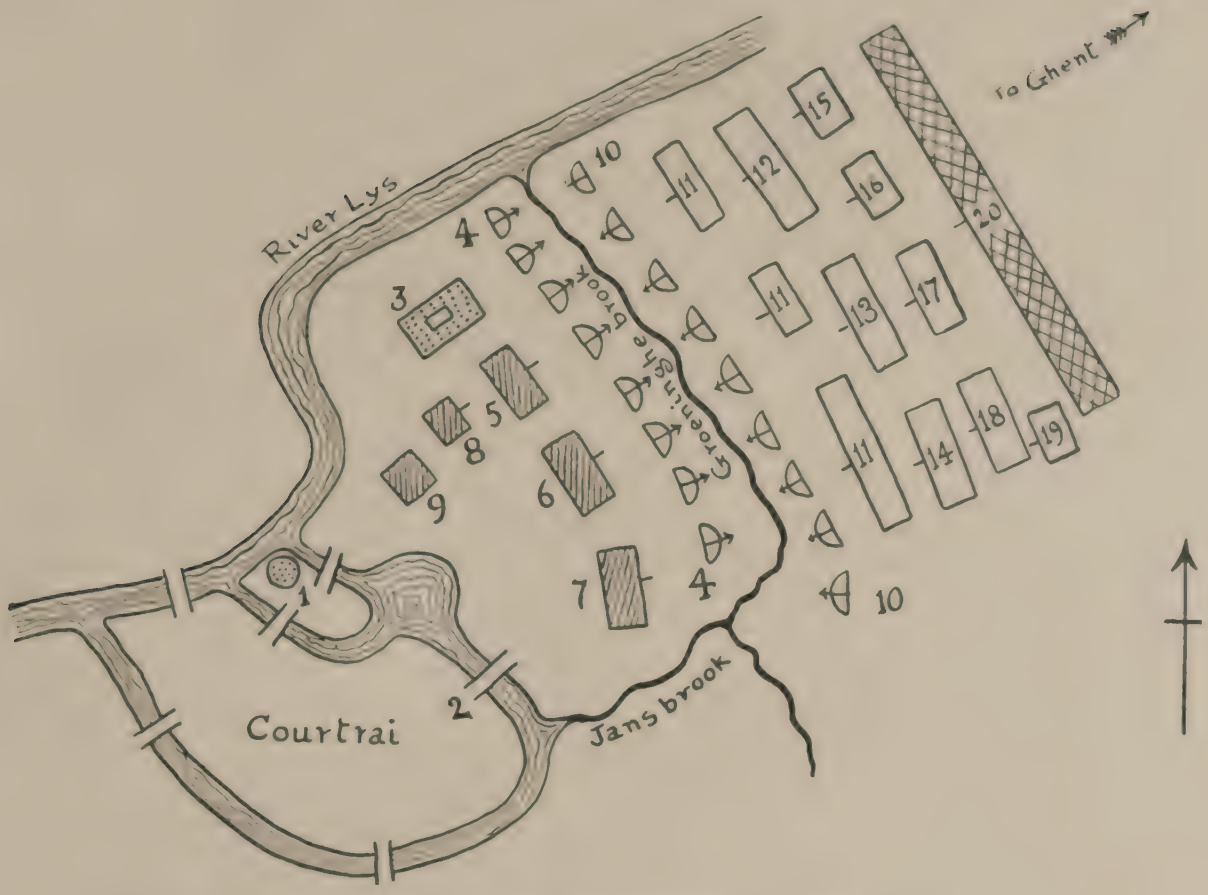


Fig. 1. Plan of the Battle of Courtrai, July 11, 1302.

1. Tower of Broel.
2. Steen Gate.
3. Abbey of Groeninghe.

FLEMINGS.

4–4. Archers.
5. Men of Bruges under Guillaume de Juliers.
6. 'Gens du Franc.'
7. East-Flemings under Gui de Namur.
8. Reserves under Jean de Renesse.
9. Men of Ypres.

FRENCH.

10–10. Archers.
11–11–11. Cavalry under Gui and Rudolph de Renesse.
12. Cavalry under Louis de Clermont.
13. „ „ Jacques de Châtillon.
14. „ „ Robert d'Artois.
15. „ „ Godefroi de Brabant.
16. „ „ Jean-sans-pitié.
17. „ „ Thierry de Lorraine.
18. „ „ Counts of Eu and of Aumale.
19. Reserves under Gui de Châtillon and Jacques de St. Pol.
20. Infantry Reserves.

arrayed in front of the town to the east, with the Groeninghe stream between themselves and the French. The order of battle on both sides was as follows: The French formed their first line of archers under Jean de Burlas, who also commanded the first line of cavalry. The second line was commanded by Gui and Rudolph de Renesse, and the third line, consisting of the flower of the army,

2,500 strong, was formed under the banners of Robert d'Artois,[1] the commander-in-chief, Jacques de Châtillon, governor of Bruges, and Louis de Clermont. The fourth line of over 1,000 men was under the Counts of Eu and Aumale, and was principally composed of Normans, while the reserve consisted of cavalry under Gui de Châtillon, and 30,000 impressed Flemings.

As in the French army, so with that of the Flemings, the front rank was composed of archers, probably the crossbowmen of the Guild of St. George. Behind these were ranged the men of Bruges on the left wing, under Guillaume de Juliers, and the 'Gens du Franc'[2] in the centre under the same leader, and the East Flemings and men of Ghent on the right under Gui de Namur. Subsequent events proved that this was the most vulnerable point of attack, as the left wing was protected by the river Lys. The reserve, drawn up under the walls, was under Jean de Renesse. At daybreak the Flemish leaders went through the army encouraging their men, and a priest, raising the consecrated Host, pronounced a benediction, while the Flemings, kneeling, took up handfuls of earth to emphasize their vow. At this moment the enthusiasm of the burghers was damped by a sudden fog which rolled across from the river. 'The sun is hidden,' cried a Fleming. 'Then we shall fight the easier,' replied Gui de Namur. This may be one of those apocryphal speeches which are frequently attributed to leaders on the field of battle, but the tradition that it was made goes far to show that the Flemish position was facing the rising sun, always a drawback whether in the days of archery or of gunnery. The archives of Bruges preserve the records of the burghers' meal before the battle, which consisted of fish, eggs, mustard and sorrel.

The French, as was obviously expected, manœuvred to the south-west to avoid fording the stream which separated the two forces, and attempted to turn the Flemish right flank. The French chroniclers insist that they were lured into this position by a light shown on the castle of Courtrai, and that the subsequent rout was caused by the fact that they had been betrayed into a network of streams and ditches concealed by branches and turf. As was invariably the case in the battles of this period, the engagement began with the archers. The effect of the French shooting, which if sustained might have thrown the burghers into confusion, was nullified by the restlessness of the supporting cavalry, and the order was given to the archers to open their ranks. This movement was not rapidly executed, and, as happened afterwards at Crécy, the French knights rode down their own men, who in dismay cut the cords of their bows and created

[1] Robert d'Artois was educated at Courtrai by his aunt Isabella, widow of Gui de Dampierre the elder.

[2] The Franc or Franconate included Dunkirk, Bergues, Gravelines, Bomburg, and Furnes, now the northern corner of the Pas-de-Calais. *Mémoires de l'Académie,* xx, p. 419.

a confusion from which the army never recovered during the day. A second attack was launched against the Flemings, and for a moment it seemed likely to be successful, for the Flemish line was pierced, but the reserve under Jean de Renesse saved the day, and the line was re-formed, Godefroi de Brabant, a renegade Fleming on the French side, falling in this attack. Again the Flemish line on the right was menaced, and again Jean de Renesse came to the rescue with the men of Ypres and turned the tide of fortune. The citizen soldiers stood firm once more, and the French cavalry, fighting on dangerous marshy ground, began to become entangled with their own men. At this moment the Flemings advanced, using as a rallying cry 'Flandre au Lion', and the confusion became a rout. Robert d'Artois, the Counts of Eu, Grandpré, and Aumale, Jacques St. Pol, and numbers of other French knights fell under the savage onslaught of the burgher infantry, and, according to the *Chronique Artésienne*, 63 nobles and over 5,000 French were killed. After the battle the Flemings murdered the wounded, mutilated the corpses, and collected vast spoils, among which were 2,000 gold or gilded spurs, from which the battle has come to be known as 'La Bataille des Éperons d'or'. These spurs were deposited as thank-offerings in the Church of Notre-Dame at Courtrai, where they remained till the year 1382, when the French, after their victory at Rosebec, entered Courtrai, recovered the spurs, and burnt the church and town. After the battle Gui de Namur and Guillaume de Juliers entered Ghent at the head of their victorious troops amid scenes of great rejoicing. The castle of Courtrai surrendered on July 13 of the same year.

At the present day there is a little chapel, a mere niche in the wall of no. 9 Rue d'Harlebecke, near the Port de Gand in Courtrai, in which is an altar decorated with the arms of Ghent, Bruges, Ypres, and Courtrai, surmounted by a gilded spur, an almost unnoticed record of one of the most sanguinary battles of Europe, and a memorial of the bravery and dogged pertinacity of a handful of citizen soldiers against the flower of French chivalry. Perhaps it may be considered somewhat superfluous to describe thus fully the battle which is only partially shown on this carving, but an excuse that may be put forward is the fact that this chest-front is the only sculptured record which treats of the battle, and as such it is but fitting that this national triumph should be described more fully than the circumscribed space at the carver's disposal could allow. The above details have been gathered from various sources, the principal of which are the contemporary *Chronique Artesienne*,[1] the *Annales Gandavenses*,[2] the *Chronique de Flandres*,[3] the *Spiegel Historiael*[4] of Lodewijk Van Velthem, and

[1] Edit. Funck-Brentano, Paris, 1899.
[2] *Collect. de Textes pour servir à l'enseignement de l'histoire.*
[3] *Collect. Belges inédites*, 1865, iv.
[4] Edit. 1727.

Guiart's *Branches des Royaux Lignages*.[1] The best modern descriptions of the battle collated from the above sources are: V. Fris, *De Slag bij Kortrijk*, Ghent, 1902; T. Sevens, *La Bataille des Éperons d'or*, Courtrai, 1902; M. Pirenne, *Bulletin de la Commission royale d'histoire*, Brussels, 1890, 1892, 1899; and Funck-Brentano, *Mémoires de l'Académie des Inscriptions et Belles-lettres de France*, 1891.

The actual scenes represented on the carving are placed in four horizontal rows, and show the incidents which preceded the battle, the battle itself, and the mutilation of the dead after the victory. Certain of the shields borne by mounted men, presumably French knights, are marked with circles, crosses, and saltires which cannot be connected with any of the military leaders who took part in the battle. It is more than probable that they are but the tool-play of the carver, who, being but a simple craftsman, would only know well the arms and badges of guilds kindred to his own, and also the arms of the principal leaders of the rising, in which he probably took an active part himself. Although it might be comparatively easy for a modern artist to depict the heraldry of all those who from contemporary records had taken part in the battle, it is practically impossible that a man who may have been a combatant, producing his carving shortly after the event, should know who were the principal leaders in the enemy's army or what their heraldic bearings might be. In dealing with the illustration the left and right will be those of the spectator (pl. XIV).

In the upper right-hand corner is a scene which may represent either the seizure of the castle of Malle and the decapitation of the governor, or the massacre of the garrison of Bruges.[2] It is more probable that the latter is intended, as it was the more important incident of the two in the burghers' revolt against the French. It may be noticed that the executioner is using his left hand, which at first suggests that it records the peculiarity of some well-known individual; but, on closer examination, it will be found that nearly all the figures which face from right to left are represented as being left-handed, obviously a stereotyped convention of the carver. At the extreme edge of this row is a little canopied shrine, in which is a female figure with hands outstretched, and below at the base of the pedestal or altar is a barrel-like object somewhat resembling the 'tronc' or box for offerings. A hand and a foot are shown on the outer edge, and these suggest that some important figure which might explain this portion of the carving has been cut off. One of the figures carries a circular concave buckler of almost identical form with those of the time of Henry VIII shown in the Tower Armouries, in the Musée d'Artillerie,

[1] Edit. Buchon, 1828.

[2] Tost apris de Bruges issirent,
Le Chastel de Malle assaillirent,
Le gent le roi lianz ocistrent.—GUIART, viii. 5771.

Paris,[1] and in the Ashmolean Museum, Oxford. The castle with the open door is probably the gate of Bruges, and in front of this are the civic authorities presenting the keys of the city to Gui de Namur, who with a mounted retinue approaches from the other side of the lock. The two leaders have their faces exposed, but all the other knights wear the sugar-loaf helm of this period. They are mounted on fully trapped or caparisoned horses, and sit in saddles with high arçon and cantel. They are protected by complete mail reinforced by poleynes at the knees and ailettes on the shoulders, both distinctive features in the defensive armour of the early fourteenth century, and over all they wear the long surcoat. Their legs are stretched out with the toe pointing over the horse's shoulder, a peculiar practice which, from illustrated records of the period, seems to have been in high favour, but which from a practical point of view does not appear to have anything to recommend it to the mounted fighting man, as it certainly shifts the centre of gravity dangerously.[2] The trappers also suggest that this overdressing of the war-horse may have been in some measure responsible for the disasters which often overtook large bodies of cavalry in battles at this time, notably at Courtrai and Crécy. It would be extremely difficult to manœuvre cavalry in close formation caparisoned in this fashion, and when riding through infantry and archers great confusion and entanglement must have certainly been caused by these flowing trappers.[3]

In the top row Gui de Namur rides first. His shield bears a lion rampant and a bend raguly.[4] The Count of Namur was second son of Gui de Dampierre, Count of Flanders, by his second wife Isabella of Luxemburg and Namur. In 1245 Gui de Dampierre used a lion rampant and a bend, and in 1251 he used the lion alone, but the Herald Gelre[5] gives the arms of Robert of Namur as or, a lion sable, langued and armed gules, a bend or baton raguly. In the carving Gui de Namur bears the bend raguly on his ailette but without the lion.

The next shield shows part of a cross engrailed. Larchey,[6] recording the arms of Flemish knights a hundred years later and more, notes that the family of Vliette bore azure, a cross engrailed argent, but there is no record that a member of this family took part in the battle. The next shield shows a cross between four annulets, probably an imaginary bearing designed only to ornament the otherwise blank shield. Next to this, and in the prominent position which

[1] *Tower*, v. 16; *Musée d'Artillerie*, i. 6.

[2] A Scandinavian work written between 1150 and 1200 (*Speculum Regale* or *Konungs Skuggsja*, printed 1768) enjoins the knight 'to exercise the feet so that your legs being extended they may stand fast in the stirrups, the heel a little lower than the toes'. A fifteenth-century Flemish tapestry at Zamora shows a mounted man whose stirrup is hung from the horse's collar, and his leg is extended almost at right angles to the body.

[3] The above-mentioned *Speculum Regale* advises that the horse should be rolled in linen armour, especially about the head, and the reins are to be protected in the same fashion.

[4] Cf. seal, Arch. Nat. Paris, 10448. [5] Wappenbuch. [6] Armorial de la Toison d'Or.

would naturally be given to one of the principal leaders, is a shield bearing a lion rampant. This probably belongs to Guillaume de Juliers, who bore or, a lion rampant sable, crowned of the field. The crown is not shown, but being the same as the field it would hardly be noticed by any but a close observer. The bearer of this shield has five annulets or bezants upon his ailette, a bearing which cannot be traced to any of the de Juliers family. The last knight bears on his shield a saltire between four annulets and a saltire upon the pennon of his lance, charges which cannot be identified. Gui de Namur entered Bruges with certain German knights in his train, and if these are represented their arms would certainly be unknown to the carver. In front of this group is a foot-soldier, also in complete mail and surcoat, carrying a peculiar weapon, which can be nothing else but the godendag, which has provoked so much controversy on the Continent, and especially in Belgium. The same weapon occurs with great frequency all over the chest (pl. XV, fig. 2).

Guiart[1] in his rhyming chronicle, *Branches des Royaux Lignages*, vol. viii, line 5428, describes this weapon most minutely:

	Translation by Sir Samuel Meyrick.[2]
A granz bastons pesanz ferrez,	With great heavy ironed staves,
A un lonc fer agu devant,	Having a long sharp iron projecting,
Vont ceux de France recevant.	They go to meet the French.
Tiex bastons qu'il portent en guerre	Such a staff, which they carry in war,
Ont nom godendac en la terre.	Is named Godendac in their country.
Goden-dac, c'est bon jour a dire	Goden-dac that is to say Good-day,
Qui en françois le veust decrire.	If one would express it in French.
Cil Baston sont lonc et traitiz	This staff is long and well contrived,
Pour férir a deuz mainz faitiz.	Made for striking with two hands.
Et quant l'en en faut au descendre,	And when it is used for a crushing stroke,
Si cil qui fiert i veust entendre,	If he who strikes understands it
Et il en sache bien ouvrer,	And knows how to work well therewith,
Tantost peut son cop recouvrer,	Quickly he may recover his blow
Et férir sans s'aller mocquant	And strike, without any jest,
Du bout devant en estocquant	With the projecting end forward, stabbing
Son enemi parmi le ventre.	His enemy in the belly;
Et li fers est aguz qui entre	And the iron is sharp that enters
Légièrement de plaine assiete	Easily and straight forward
Par touz les lieuz ou l'on en giète,	Into all places in which it may be thrust,
S'armeures ne le détiennent.	If armour does not resist it.
Cil qui ces granz godendaz tiennent	Those who wield great godendacs
Qu'il ont a deux poinz empoingniez,	And have grasped them with both hands
Sont un poi des rens esloigniez.	Should draw aside a little from the ranks.

[1] Guiart was a crossbowman in the army of Philip le Bel in 1304. He was wounded at Arras.

[2] *Antient Armour*, i, 192.

Up to the present time the only other illustrated record of this weapon was found on a wall-painting discovered in a brewery near the Porte de Bruges at Ghent.[1] M. Félix de Vigne, the noted Belgian antiquary, was present at the discovery of the paintings in the year 1840, and had careful copies made of each portion before the building was demolished, and published notes on the weapon shown, which he considered without a doubt to be the godendag described by Guiart (fig. 2).

Fig. 2. The Guild of S. Sebastian, from a wall-painting formerly in a chapel near the Porte de Bruges, Ghent. (Félix de Vigne, *Recherches historiques sur les costumes civiles et militaires des Gildes*, 1847.)

A portion of one of these paintings is reproduced in fig. 2, from which it will be seen that some of the weapons, though longer and more slender than the majority of godendags shown on the carving, are of precisely the same construction, namely, a wooden shaft swelling out at the upper end and terminated by a spike, obviously a primitive weapon, and one easy to be manufactured by levies of craftsmen raised in haste. After the original paintings had been demolished M. de Vigne appears to have been accused of altering or elaborating the details in his copies, especially the form of this weapon, which so completely

[1] There had been a chapel known as the 'Leugemeete', dedicated to SS John and Paul, on this site.

fitted the description given by Guiart; and, as a protest, he printed an attestation signed by Ch. Vanderhaughen, owner of the building, H. G. Moke, Professor of Ghent University, H. Vanderhaert, Director of Ghent Academy, B. Verhelst, F. Goetghebuer, architect, and A. Dilhens, artist, eminent antiquaries of Ghent, who all vouched for the correctness of his reproductions.[1] In spite of this the antiquaries of Belgium for the last seventy years have continued to throw doubts upon his artistic veracity, and their strictures are principally levelled at the godendag, for which term they appear to have a rooted objection, preferring to call it by the less expressive name of the 'Plançon à picot'. It is true that the word does not occur in the Flemish chronicles of the period, and is not to be found in any of the local archives, but one cannot seriously consider that contemporary writers such as Guiart, Villani, Godefroi de Paris, and other French chroniclers would each employ the term if it were not in common use, probably as a kind of slang, at the period of writing.[2]

The second row on the left shows a priest blessing the burghers before the battle, and here also there are suggestions of a curtailing of the composition. In fact, it must be obvious that the lock was always the centre of the panel, and if portions have been cut off on one side an equal area has been taken off the other (pl. XV, fig. 1).

According to Van Velthem, the men of Bruges wore surcoats of blue and

[1] *Recherches historiques sur les costumes civils et militaires des Gildes*, Félix de Vigne, 1847.

[2] The following references to the godendag are found in various contemporary records, a proof that the word was an accepted term for a peculiar type of Flemish weapon up to the middle of the fifteenth century:

1316. Chascun tenant son godendart
Levez contre françois les fers.—*Godefroi de Paris*, v. 1242.

1322. 2 godendach dont il y a en l'un une broke de fer.—*Inv. de Robert de Béthune*, p. 247.

1355. Que toutes manières de gens, habitans en la ville et en suburbez de Poitiers, seront contrains à euls armer chacun selon son estat; c'est assavoir les riches et les puissans de toutes armures, les moiens de lances, pavois ou godandac et de cote gambezié et les menus de godendac ou d'espée.—*Ordonnances des Rois*, iv. 169.

1370. (Description of the battle of Courtrai, 1302.) Ceux de Bruges portant avec eux ensement aucunes reliques de sains, et à glaives, à lances, espées bonnes, haches et goudendars.—*Chroniques de S. Denis*, v. 139.

1417. Un baston que l'on appelle goudendart qui est à la façon d'une pique de Flandres combien que le fer est un peu plus longuet.—Du Cange, *Gloss.* s.v. Godandardus.

1436. (Song of the English against the Flemings after the siege of Guisnes.)
With habirgeons and hounsculles
And rusti kettill hattes
With longe pykes and goden daghes
For to stikke the rattes.—*Brut* (*Early English Text Society*, O.S. 136, ii. 582).

1530. . . . les corps des autres eussent esté tresperciez de guidendars.
Décades de Tite-Live, i. 165.

Fig. 1

Fig. 2

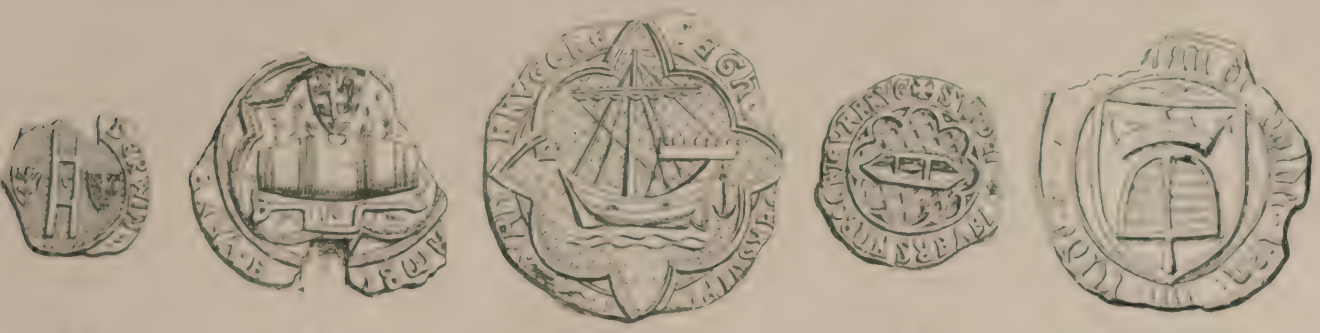
Fig. 3

FLEMISH GUILDSMEN AT COURTRAI

[Detail from the Chest-front at New College, Oxford]

Published by the Society of Antiquaries of London, 1914

green, and of yellow and brown, those belonging to the Guild of Archers wearing red. De Vigne gives the numbers of guildsmen engaged as: Weavers, 1188; Shearers, 1024; Fullers, 1984. The badges on the banners can be easily identified from the records and drawings of seals collected by M. Felix de Vigne in his work on the costumes of the Guilds, above referred to (figs. 3, 4). The first man carries the banner of the Vintners or Cellarers. Their badge was a sled or trammel by which casks are slid down into the cellar, known in the trade at the present day as a 'pulleys'. The second banner is that of a kindred guild, the Measurers of Wine, who bore a cask and an awl for piercing the bung.



1 2 3 4 5

Fig. 3. Seals of the Guilds.

1. Cellarers (*wynscroeders*), Bruges, *Arch. Bruges*, 1356.
2. Measurers of wine (*wynmèters*), Bruges, *Arch. Bruges*, 1356.
3. Shipmen (*scipliede*), Bruges, *Arch. Bruges*, 1356.
4. Weavers (*tycwevers*), Bruges, *Arch. Bruges*, 1356.
5. Fullers (*volders*), St. Trond, *Archives of St. Trond*, 1481.

These arms are very similar to those of the Coopers, who bore a cask and an axe or adze, but the crude representation given here suggests the awl rather than the adze. The third banner is that of the Boat-builders, or possibly the Shipmen of Ghent. The former bore a ship in dock, and the latter showed a ship at sea. The fourth is that of the Weavers, bearing a shuttle, and the fifth shows the carding comb of the Fullers.

Once it is established that the godendag is the distinctive weapon of the citizen soldiers, it may be assumed that all those who carry it are Flemings; and, in view of the fact that the triumph of the Flemish troops over the French was one of infantry over cavalry, we may also assume that the foot-soldiers are Flemings and the mounted men, with the exception of those in the top left-hand corner, are French.

In the centre of the composition is a small tower, with a man looking out of a window. This may be considered to be the castle of Compiègne, with Gui de Dampierre in prison, symbolical of the cause which directly led to the

battle. To the right of this is a mounted knight whose shield and horse-trapper show a lion rampant. It is possible that this represents Godefroi de Brabant, lord of Aerschot, a renegade Fleming, who bore sable, a lion or, langued and armed gules, with a label of four points gules.[1] It is hardly to be expected that the carver would know much about these intricate marks of cadency, which, if known, would be minute and difficult to carve; but he might know the important part of the arms of this well-known family, and would represent the attack on the renegade with a certain amount of pleasure. Behind the archer, who uses a stirrup crossbow, in this row is a shield showing five annulets, the complete bearing being probably six or nine.

The Counts of Boulogne bore three bezants, and the family of Châtillon and St. Pol bore gules, three palets vair, a chief or. Both of these families were represented at the battle, but it is more likely that the markings are purely imaginary.

A decapitation is also shown in this compartment. The bowl at the extreme edge does not explain itself in any way, and rather suggests, as was pointed out above, that the panel has been cut at this part.

In the lower corner on the left is the castle of Courtrai, with the traitor Guillaume de Moscher escaping by a rope, and possibly the Castellan of Lens, who commanded the castle, looking from a window. Above the battlements is seen a trebuchet, evidently loaded as the counter-weight is raised, and below this, over the gateway, is a barrel, probably containing pitch or stones, slung in readiness in case of an attack on the gate. The portcullis is raised, and a sortie is taking place, of which there is no record in the contemporary chronicles. The men of Ypres had been especially detailed to watch the castle in the rear of the Flemish army, but it does seem to have been an extraordinary error of tactics on the part of the commander not to attempt a sally in the rear of the Flemish troops when their centre had been broken. Van Veltheim records that the Steenporte which led out across the Groeninghe to Ghent was open, and that the governor of the castle fired the outskirts of the town to prevent a retreat of the Flemings in this direction.

In the extreme left-hand corner is an archer's pavis transfixed by two arrows, also suggesting that the composition was fuller in this part originally. Two of the foot-soldiers are shown as using curved falchions, and one carries a buckler similar to that on the top row, but seen from the inside, with a cross handle. The falchion was a comparatively new weapon, probably introduced into Europe during the Crusades. It is eminently more practical for a foot-soldier than the heavy straight sword which continued in use from the Norman Conquest to the middle of the sixteenth century.

[1] Guillaume, Duc de Brabant, bore azure four lions rampant argent on his trapper. Vree, *Armorial des Contes de Flandres.*

The castle of Courtrai displays two banners, one bearing a single fleur-de-lis, and the other a cross. The first may be fairly claimed to represent the banner of France in a simplified form; the other is the banner of the Castellan of Lens, who had charge of the castle of Courtrai. Issuing from the gate of the castle is a mounted Frenchman, whose shield bears a cross counter pierced and five annulets, but this is probably an imaginary bearing, as one of the circles is placed on the head of the cross, while the other four are on the field. He is opposed by the men of Ypres, who bear their badge, a patriarchal cross, ✝, on their surcoats. The fact that these troops are shown guarding the approach to the castle is another incontestable proof that the carving is contemporary, for an artist of a later period would never have known this detail of the battle array, which is alluded to by Veltheim and other contemporary writers. Possibly the carpenter-carver was a member of the Ypres Guild, and thus recorded the important part played by his fellow-citizens when they turned the tide of victory. He may indeed have been present himself at the battle, and if this were the case it would explain the fact that the banner of Lens is the only example of French heraldry correctly shown, for he would, if an Yprois, have seen this banner clearly from his position with the reserve, but he would have had no knowledge of the other French armorials, which he would only have seen in the stress and turmoil of the battle.

To the right of the castle is a knight being attacked by Flemings, one of whom is stabbing the horse. His shield shows a saltire between four trefoils. From the prominence given to this figure and from the fact that it is shown immediately over the disembowelled corpse, which is probably intended to be that of Artois, it is likely that this group portrays the death of the French leader, whose horse was killed under him. It is superfluous to point out that he should bear the arms of France royal with a label,[2] but here again the ignorance of the carver may be justly pleaded. The godendag of the Fleming who is attacking him is longer and thinner than those shown elsewhere on the carving, and approximates more nearly to the weapons depicted in the copy of the wall-painting, fig. 2.

To the right of Artois is the Flemish army meeting the main French attack, which is indicated by the head of a fallen horse (pl. XV, fig. 2). All except the leader carry the godendag, and behind is shown a stirrup crossbow. Gui de Namur and Guillaume de Juliers, both dismounted, lead the van, the former bearing on his surcoat and ailette the lion rampant with a bend raguly, and

[1] Gheast (*Blason heraldique*) gives Lens Contrecartelle or et sable. The French used the cross as late as the year 1380 (Dugesclin, *Coll. Petitot*, xvi. 836).

[2] Seal, Arch. Nat. Paris, 917.

the latter a lion rampant, both of which are also shown on the top row of the carving. Between them is a banner, which has been cut at the place where the iron staple was inserted to join the boards, and this shows the bend raguly, but the lion is not by any means clear.

Behind de Juliers is a banner displaying a cross raguly or embattled. This is probably a piece of artistic licence, and is intended to be the ensign of the crossbowmen of Ghent, who occupied the first line of battle, and bore the cross of St. George, their patron saint.[1] Next to this is a banner showing a lion, which from its position in the line may be taken to be that of Flanders,[2] and the other banner on which is a lion also may be that of Ghent.[3] Certain of the guilds used lions as their arms, but it seems to be more probable that the above are territorial and not guild banners. Between these is the banner of the Guild of Carpenters, an axe and an adze. From the prominence given to this guild it seems likely that the carver of the chest was a member of this confraternity.

The sixth banner is that of the Smiths, with hammer and horseshoe; the seventh of the Masons, with trowel and square; the eighth probably may be assigned to the Brokers of Bruges, who bore a shield paly of six, argent and gules. The last banner shows a cross between four objects formed like the letter W. This most certainly represents, though crudely, the arms of Pierre Coninc, the leader of the burghers. M. Victor Fris, in his exhaustive monograph on the battle, describes a document dated 1331 preserved in the archives of Bruges, which bears the seal of Coninc: 'Een schild met het kruis gekantoneered van vier gebloemde kronen,' a shield with a cross cantoned with four crowns fleury. The inscription round the seal runs, 'S(igillum) Petri Regis Militis'.[4] The Plasterers' and Tilers' Guilds of Ghent were under the protection of the 'Four Crowns', the four sculptor martyrs SS. Carpophorus, Severus, Severianus, and Victorinus; but M. Fris's record of the arms of Pierre Coninc coincides so exactly with the carving that there can be no doubt but that these are the arms of the leader of the burghers and of no other. The crude markings on the banners on the second and third rows may be compared with the reproductions of the guild-seals taken from M. de Vigne's work, and it will be seen that although they vary in some unimportant points and are less elaborate, the carver knew the principal themes perfectly and represented them with quite sufficient accuracy (pl. XV, fig. 3).

[1] This guild has continued without a break up to the present day.

[2] Or, a lion rampant sable (see fig. 5).

[3] Sable, a lion rampant argent, armed, crowned and collared or, langued gules (see fig. 5).

[4] M. C. van der Haute, Keeper of the Archives of Bruges, writes that this seal is now in a bad state, and that a photograph would be of little use as an illustration.

Fig. 4. Seals of the Guilds.

1. Carpenters (*timerliede*), Bruges, *Arch. Bruges*, 1356.
2. Smiths (*smets*), St. Trond, *Arch. St. Trond*, 1481.
3. Masons (*machenaers*), Bruges, *Arch. Bruges*, 1356.
4. Brokers (*makelaers*), Bruges, *Arch. Bruges*, 1356.

The lowest portion of the carving shows the mutilation of men and horses the central figure doubtless representing the hated Robert d'Artois, who was stripped and apparently disembowelled. To the right is a man stripping the hauberk from a corpse in precisely the same manner as is shown on the Bayeux tapestry in that portion which illustrates the battle of Hastings.

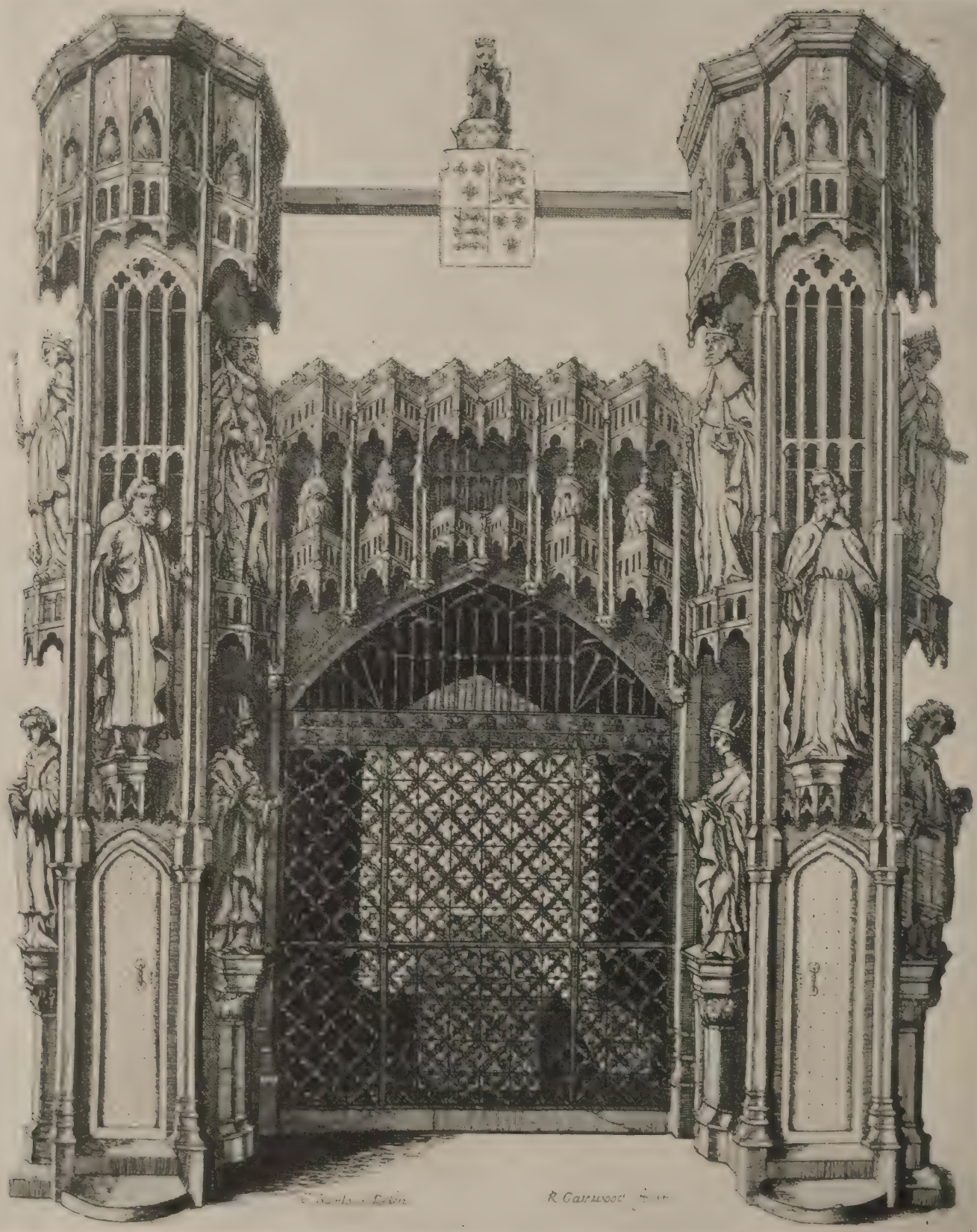
The attitude of certain Belgian antiquaries of note with regard to the godendag is somewhat difficult to understand. If they base their disapproval of the use of the term on the fact that it does not occur in Flemish records their standpoint is perfectly natural, and may be reasonably respected, though the frequent occurrence of this peculiar word in French records and Guiart's minute description and explanation are most undoubted proofs that it was a Flemish and not a French term used at the time. If, however, they base their arguments entirely on the alleged falsity of the wall-paintings at Ghent, then without a doubt this crudely carved chest-front, hidden away for centuries, and brought to light from a farm-house in Oxfordshire, must once and for all prove the accuracy of the copies made by that most careful of Belgian antiquaries, M. Félix de Vigne. There are no other records, sculptured or pictorial, in which such a weapon is shown, so that M. de Vigne can have had no data for altering the copy of the painting even if he had been so minded, and the close similarity between the godendag shown on these paintings and the weapon carved on this chest-front proves incontestably after nearly seventy years that M. de Vigne was, what English antiquaries have always considered him to be, a careful and minutely correct recorder of the manners, life, and costumes of Flanders. It may be of value, in conclusion, to sum up the evidence given above as to the authorship of this carving. It is impossible, as has been hinted by certain Belgian authorities, that this should have been perpetrated in later years, as none but a well-read historian would know the arms of Comine and

those of all the guilds, or would be aware that the Yprois were posted in reserve by the castle. As evidence of the actual carver this last is important, and from the fact that the Yprois alone of all the guildsmen bear their city's badge on their surcoats, and that the banner of Lens was the only ensign they would see clearly from their position, and is the only French armorial correctly shown, it is more than plausible to suggest that the artist came from Ypres and formed part of the reserve at the battle. The prominence given to the banner of the Carpenters suggests that he was a member of this guild. It is to be hoped that this record will be carefully preserved for all time, for it is no exaggeration to state that it ranks with the Bayeux Tapestry as a contemporary illustration of important historical events, and in some details is unique among the monuments of Europe.

1 2 3 4 5

Fig. 5.

1. Arms of Ghent.
2. Seal of Courtrai (Paris, Arch. Nat. 10688).
3. Arms of Flanders.
4. Seal of Ypres (Paris, Arch. Nat. 10754).
5. Arms of Bruges.



WESTMINSTER ABBEY CHURCH: THE WEST FRONT OF THE CHANTRY CHAPEL OF KING HENRY V.
From Sandford's *Genealogical History of the Kings of England*

Published by the Society of Antiquaries of London, 1914

IV.—*The Funeral, Monument, and Chantry Chapel of King Henry the Fifth.*

By W. H. St. John Hope, *Esq., Litt.D., Hon. D.C.L.* (*Dunelm*).

Read 5th February and 12th February, 1914.

So much has been written about the abbey church of Westminster and the historical monuments wherewith it is filled that to most people it may seem superfluous to write anything more about it. But as a matter of fact the Abbey and its church are still an architectural and archaeological mine that has really been little worked scientifically, and it is for that reason that I venture to lay before the Society of Antiquaries, which has always had a special interest in Westminster Abbey, some notes upon the funeral, the tomb or monument, and the chantry chapel of King Henry V.

1. The King's Funeral.

First, as to the funeral. King Henry died on the last day of August, 'on the Monday next after the feast of the Beheading of St. John, in the year of our Lord 1422, between the second and the third hour after midnight, at Bois de Vincennes in the parts of France,' so runs the official record on the Close Roll.[1] There are at least three contemporary accounts of the funeral, in French, Latin, and English, together with a later version also in English. From these it is possible to form some idea of what must have been one of the most imposing pageants of the kind ever seen in this country.

The French account, by Enguerrand de Monstrelet, gives a graphic description of the pageant as seen in France, and the chronicler seems to have been not only an eyewitness of it, but, if he did not accompany it to England, to have obtained an accurate version of its passage from Dover to Westminster. When done into English Enguerrand's story is as follows:

> And soon afterwards his bowels were buried in the church and monastery of S. Mor de fossez. His body, well embalmed, was put into a coffin of lead . . . and the abovesaid King, accompanied by his English princes and them of his household with a great multitude of other folk, was brought in great triumph to Paris and taken into the church of Our Lady, where was held a solemn service; and from there he was brought, accompanied in great state, into the city of Rouen, and there he remained for a fairly long time . . . and after

[1] Close Roll, 1 Henry VI, m. 21 *d.*; Rymer, x, 253.

the lords of the blood royal had put him upon a charet, which four great horses drew, and had made his resemblance and representation of boiled leather painted very neatly, wearing on his head a most precious crown of gold, and holding in his right hand the sceptre or royal virge, and in his left hand he had a golden globe, and he lay on a couch on the charet above, his face towards the heaven. The covering of which couch was of cloth of red silk beaten with gold, and with that was borne on high when passing through the large towns, above the charet, a most rich cloth of silk, in the manner that is wont to be borne over the body of Jesus Christ on Corpus Christi day. And thus going in great state, accompanied by his princes and by the knighthood of his household, was brought straight from Rouen to Abbeville, and placed in the church of St. Wulfran . . . and always on the said road there were about the said charet many men clad in white who bore in their hands lighted torches; and behind, clothed in black, were they of the family of the said King's household; and then followed after they of his race, clad in raiments of tears and lamentations. And following all that went the Queen in a great company about a league long after her said lord. Who, as it is said, was brought to Calais, and from there they went by sea to Dover in England; and then through Canterbury and Rochester they came to London, where they arrived the night of St. Martin *in hieme*. To meet the King there came out from the said town of London fifteen bishops vested in copes and many mitred abbots and other men of the Church in large number, with a great multitude of burgesses and other commons; the which churchfolk at the same time mourned the said King within the said town whilst chanting the office of the dead; and they brought him by London Bridge and through Lombard Street[1] to the cathedral church of St. Paul; and close to the charet, weeping and lamenting, were the princes of his lineage. The first horse of the four that led the said charet on which the King was had a trapper which was painted with the old arms of England; on the trapper of the second horse were painted the arms of France and England quarterly (the which arms he himself bore in his lifetime); on the trapper of the third horse were simply painted, without any difference, the arms of France. And on the trapper of the fourth horse were painted the arms which (when he lived in this world) the noble King Arthur, whom none could vanquish, bore, the which arms were a shield of azure with three crowns of gold. And after that the service of the said King had been royally done, they carried him to be buried in the church of Westminster among his predecessors the Kings of England. At which burial there was in all things generally greater estate and display (?) than had been for any of the other Kings of England for two hundred years.[2]

The French chronicler's statement as to the route taken by the funeral procession after its arrival in England (but not through London) is confirmed by a document that may be taken next in order.

This is an entry on the Issue Roll reciting a payment of £300 12*s.* 6*d.* to Simon Prentot, 'wexchaundeler' of London,

for divers herses to be made by him at Dover, Canterbury, Ospringe, Rochester, Dartford, St. Paul's London, and at Westminster, for the funeral of the most excellent prince and

[1] This is not quite accurate. See the London account, *post*, from Letter Book K.

[2] See Appendix A.

lord King Henry the fifth, brought from the parts of France through the vills and cities aforesaid and to be buried at Westminster aforesaid.[1]

For the carriage and other necessaries of these herses and other lights for the said king's funeral, John Baldok, Roger Wylles, and John Redy were to provide all things, and to carry them from the city of London to the town of Dover and back again.[2]

The average cost of the seven herses to be provided by Simon Prentot was just under £43, but there is no need to assume that they were all of equal magnificence. That provided at St. Paul's for the funeral of King Edward III cost only £11, while on that set up for him at Westminster £59 16*s.* 8*d.* were spent. And it will be shown presently that after King Henry's burial his executors compounded with the abbot and convent of Westminster for £53 6*s.* 8*d.* for the herse and 200 torches. The seventh herse must therefore have exceeded the others in splendour.

There is one mistake in the Frenchman's account, in the date which he gives for the arrival of the pageant in London. This he states was on the evening of St. Martin *in hieme*, that is, the 11th of November. But we shall see presently that the king's body reached Westminster on Friday, 6th November, and was buried on Saturday the 7th. The procession must therefore have reached St. Paul's on the evening of Thursday the 5th; and if it rested a night at Dartford, Rochester, Ospringe, and Canterbury, it should have arrived at Dover on the 31st of October, exactly two months after King Henry's death.

The contemporary Letter Book of the Corporation of London[3] gives the provision made by William Waldersee the mayor and the aldermen for the reception of the corpse of the most illustrious and virtuous prince the lord Henry the Fifth, namely, that after the streets of the city and borough of Southwark have been cleansed, the mayor, sheriffs, aldermen, recorder, and officers, and the more sufficient persons of the whole city shall proceed on foot as far as St. George's Bar, clothed in black, together with three hundred torches borne by 300 persons clothed in white gowns and hoods, and there reverently salute

[1] 'Die . . . xxvj° die Septembris.

Pro diversis herceis per ipsum apud Dovorr' Cantuar' Hospring Rouchestr' Dertford Sanctum Paulum London. et Westmonasterium fiendis pro funere excellentissimi principis et domini Regis H quinti de partibus Francie in Angliam per villas et Civitates predictas sic ducend' et apud Westmonasterium predictum sepeliend.' Issue Roll (Pells), 10 Henry V, Easter, No. 645.

[2] 1422, 15th October.

'Ad cariagia et alia necessaria pro herceis et aliis luminaribus circa funus carissimi domini et Patris nostri defuncti disponendis et expendendis infra libertates etc. pro denariis nostris in hac parte rationabiliter solvendis arestandum et capiendum. Et ea a civitate nostra Londoñ usque villam Doverre et a dicta villa usque dictam civitatem revertendo cariandum.' Rymer, *Fœdera*, x, 255.

[3] Letter Book K, pp. 2, 3.

the corpse, following it the first day as far as St. Paul's church, and the second day to Westminster. Throughout the street, from the 'stulpes' at the end of the bridge towards Southwark as far as the corner of the cross-roads at Eastcheap, shall stand men of the wards of Bridge, Billingsgate, [and the Tower], with lighted torches, and the chaplains of the churches and chapels within the said wards shall stand at the doors of the churches, habited in their richest vestments, and bearing in their hands censers of gold and silver, whilst they solemnly chant the *Venite*, and cense the corpse as it passes. The like by men of five other wards from the corner of Eastcheap up to Cornhill; and by four wards from the corner [of Cornhill] to the Stocks; and by four wards from the Stocks to the Great Conduit; and by four wards from the Great Conduit to the west door of St. Paul's. There then follow the names of the thirty-one 'mysteries' which provided the torches, the remains of which were returned to them. The Mercers and four other mysteries each provided 12, the Hatters being lowest with 2; the total of these torches was 211. The chamberlain at the cost of the commonalty gave each torch-bearer a gown and hood of blanket.[1]

The Latin account of the king's funeral is to be found in the *History of England* of Thomas of Walsingham, who writes of the grief of his subjects for King Henry's death, of the honours paid to his memory by the French people, and of their desire to have him buried in France. He describes shortly the bringing over of the king's body into England, and lastly his funeral in terms which I have ventured to translate:

The equipment of the dead King, if it would please you to know, was as follows: There was placed upon the chest in which his body was, a certain image very like in stature and face to the dead King, arrayed in a long and ample purple mantle furred with ermine, a sceptre in one hand, and a round gold ball with a cross infixed in the other; with a gold crown on the head over the royal cap, and the royal sandals on his feet. And in such wise he was raised on a charet that he might be seen of all, that by this means mourning and grief might grow, and his friends and subjects might the more kindly beseech the Lord on his soul's behalf. Moreover, there was borne a thousand torches, carried by venerable persons about his body, and golden and silken cloths were offered for the same. There were also led to the high altar of Westminster three dextriers with their riders, as is customary, [*word omitted*] with the arms of the King of England and France, [and] very excellently armed. And thereupon the riders were there despoiled, their arms utterly taken away, besides the banners that were borne about the body of the dead man, containing the arms of St. George, of England and France, and images of the Holy Trinity and of St. Mary.

And so the body of the said King is brought to the monastery and, with the service of the prelates and chief men of the realm, was honourably buried among the Kings of

[1] I am indebted to Mr. C. L. Kingsford, M.A., F.S.A., for the above abstract of the account in Letter Book K.

England there between the shrine of St. Edward and the chapel of the Holy Virgin, in the place where the relics were kept there.[1]

The contemporary English record of King Henry's funeral is in a manuscript in the Heralds' College. After describing the king's death, the embalming of the body, and its lying in state, it continues:

f. 29] This done he was takyn away . . . and then chested whiche cheste was coveryd over with blak velvyt close sowyd to the same / apon yt a large cros of whyt satten / apon all lay a Ryche klothe of gold and so was borne by viij knyghtᵉ from hys chamber to the charet and iiij erles bare the iiij corners of the Ryche Klothe of gold as yf the had borne hym and other iiij Knyghts bare the canapy ov' hym to the charet the whyche charet was prepared and ordeind in this wyse / yt was bayled ower of a good heigh and the sayd baylys cov'ryd ov' wᵗ blake velvet close soyd to the same open of both sydes and endys the pomells and sydes of the charet and the endys of the bayles made wᵗ the Kyngs armes / and the sayd charet and whelys made blake / and wᵗ in the same two blokes of a good heigh for the corps to ly uppon and ov' the corps a clothe of mageste with o' lorde settyng in Jugment / the whiche was frynged / above the sayd charet a large and Ryche blke kloth of gold wᵗ a cros of whyt clothe of golde whiche was Rowled uppon that every man myght see the Ryche Klothe of gold and the Image that was wᵗ in the charet / whiche Image was made lyke unto hym as yt cold be.

f. 29 b] and clothe as before in a fur cote and mantell of estate the lasys wᵗ Ryche knoppes and tassels of gold and sylke goodly lyyng on the belly the septer on hys Ryght hand the Rownde bawle of gold in his lefte hande / on hys hede a crowne and thys Image layde in the charet a pone the Ryche clothe of gold a pone the Corps under hys hede a cosshyn of clothe a gold and so lay open facyd / at hys hede and fete burnyng too morters of wex and iij banners of saynts set a bowte the charet at the hede on the Ryght syde the banner of the trenete a gaynst hyt on the other syde the banner of o' lady at the fete in the myddes was sett the banner of Saynte George / the whiche charet was drawen wᵗ fyve large corsers trapped wᵗ thes armes the formose horse trapped wᵗ the armes of saynte george the ijᵈ horse wᵗ the armes of englond the iijᵗʰ wᵗ the armes of saynte edmonde the kynge the iiijᵗʰ wᵗ the armes of englond the vᵗʰ wᵗ the armes of saynte edwarde the confesor and one ev'y horse fore sede a chochyne of the armys of saynte george a page Rydynge in a morning habyt and every horse led by a grome of the stabyll in morninge habyte wᵗ hodes on there hedes / and greate nomber of torchys borne by yemen a bowte the charet and greate toreches borne by fore them by pore people before the formose horse Rode a knyght in morninge habyt hys horse traped wᵗ blake welvet on ev'y quarter a scochyne of armes / whiche knyght bare the banner of the Kynges armes / and befor hym Rode the heraulides of armes werynge the kyngs cote armo' ther horse trapped wᵗ blake / before theym iiij Knyghts the horses

[1] Appendix B.

[2] MS. 1st M. 14, f. 29. The account is headed: 'The Enterement of the moste famous and victorious prynce Kynge Harry the Vᵗʰ whiche died at [bys devynes *struck through and altered to* bois devyncenes in France the xxxj day of August 1421' [*sic*].

traped w^t^ blake velvet the whiche bare two shylde The one bare the shylde w^t^ the armes of Englond the other the armes of fraunce the other two knyghts bare the helmes and the creste of the same before them Rode a knyght whiche bare a standurde hys horse trapped in lykewyse w^t^ velvet / and every one of thes horses havyng on ev'y quarter on them a chochen of the foresayd armes / an Erle armed complet hys horse trapped and garnysshed whyth the Kyngs armes Rode bare hedyd next before hym that bare the banner of armes and in hys hande a batylax borne w^t^ the poynte downwarde / before the standarde rode the lords and knyghts / and before them prelats in pontificalibus and before them they of the Kyngs chapell / and before them all seculer prests / and before monks chanons & fryers in order / before them the gentyllmen and hede offycers of howsehold / and nex after charet Rode the lorde chieffe mo'ner a lone / and then all the other mo'ners in good order / and after them went the nobel estats of the counsell ther horses trapped wyth blake klothe / then foloyd hys hosehold servaunts and all other that wold thys in good order the corps was brought thoro London where as the mayer and hys brotheren w^t^ all the worshypoull crafts stode in good order[1] and soo was brought to Westeminster Jamis Kyng of Skots / thomas duke of Exsyter unkel to the kyng edmonde erle of marche Rycharde erle of warwyc humfrey erle of staforde edmond beawford cosyne Jermayne to the kynge / the lorde audley the lord morley the lorde lovell the barran of Dudley John the lorde Cromwel S^r^ Wyllyam Phelyppe treseror of hose hold the lord sowchet / S^r^ Wyllyam porter carver to the Kyng the lord fitzhugh chamberlayne S^r^ Walter hungerforth.

The fourth account of the funeral is by Edward Hall, in his *Union of the two noble & illustre famelies of Lancastre and Yorke*.[2] He states that the king's body 'was embaumed and closed in lede', and laid in a 'charet' with a representation of the king; but the charet, he says,

was drawen with syxe horses richly trapped w^t^ severall armes, the first wyth the armes of S. George, the .ij. with tharmes of Normandy, the .iij. with the armes of King Arthur, the .iiij. wyth the armes of S. Edward, the fyft wyth the armes of Fraunce onely, and the syxt with the armes of England and Fraunce.

Hall also states that the banners of the saints were borne by the lords Audley, Morley, Lovel, and Zouch, the king's standard by John lord Dudley, and the king's banner by the earl of Longueville.

The Hachementes [he continues] wer borne onely by capitaynes to the nombre of .xij. and rounde about the charet rode .ccccc. men of armes al in blacke harnes, & there horses barded blacke wyth the but of their speres upward. . . . Besides this, on every syde of the charet went .ccc. persons holdyng long torches, & lordes bearyng baners, banerots & penons. With this funerall pompe he was conveyghed from Boys de Vincens to Paris, and so to Roan, to Abbevile, to Caleys, to Dover, and so throughe London to Westminster, where he was buried with suche solempne ceremonies, suche mournyng of lordes, such prayer of pryestes, such lamentynge of commons as never was before that daye sene in the Realme of Englande.

[1] *in margin:* lordes that did accompany the corps on that Jorney.

[2] London, 1548. *The Victorious Actes of Kyng Henry the fifth*, fol. l.

Of these accounts, Thomas of Walsingham's short chronicle is of value for its minute description of the king's funeral effigy. He also refers to the offering of gold and silken cloths, and tells us the devices of the banners carried by the four lords, but there is no evidence to confirm his story of the three dextriers and their riders being led up to the high altar of Westminster and there stripped of their arms and armour.

The Heralds' College account is of the first importance by reason of its fullness, and it may, I think, be taken as the official record of the conduct and order of 'thys dolorous dole', as Hall calls the procession, after its arrival in England.

Whence Hall got his account it would be interesting to know, as it contains several interesting additional facts, but there is a curious discrepancy between his and the Heralds' College account as to the number of the horses that drew the charet. The Frenchman distinctly states that only four horses were used in France, but the Heralds' College account enumerates five, and Hall's six.

There arises a further question as to the arms on the horses' trappers. The French chronicler calls them 'the old arms of England', the king's own arms of France and England quarterly, the undifferenced arms of France, and the arms of King Arthur, which he describes as 'a shield of azure with three crowns of gold'. These last are, of course, what we should call the arms of St. Edmund, and possibly the 'old arms of England' were those of St. Edward rather than St. George. The Heralds' College account describes the trappers of the *five* horses as bearing the arms of St. George, of England, of St. Edmund, of England again, and of St. Edward; while Hall decks his *six* horses in trappers of St. George, Normandy, King Arthur, St. Edward, France, and England quartering France. If by Normandy is meant the leopards of England, and King Arthur's arms are again St. Edmund's, then Hall agrees with the Frenchman, but he adds England and St. George. The Heralds' College account, too, would fall into line if we may assume that the second trapper of England was actually of France and England quarterly, and that a sixth horse with a trapper of France has been overlooked by the chronicler.

Another document that has been preserved partly clears up the horse and trapper difficulty, and also helps to carry on the story of the funeral pageant. It is a bill (which I have ventured to translate) of

Particulars provided in the Wardrobe of King Henry the Fifth by Robert Rolleston keeper of the same wardrobe for the burial of King Henry aforesaid.

In the first place from William Cantelowe twenty pieces of short black buckram, *@* 3*s.* 4*d.*	66*s.* 8*d.*
Also from Hugh Dyke nine pieces of long buckram @ 6*s.*	54*s.*

Also from William Caudewell four bastard saddles with their harness @ 26*s.* 8*d.* 106*s.* 8*d.*
Also to the same William for the work of six traces covered with blue tartarin for a charet (*chaare*) for the King's body 20*s.*
Also to the same William for 2000 'braket naill' @ 8*d.* 16*d.*
Also to Thomas Daunt for the beating of 220 ells of valences for the King's herses, viz. per ell 12*d.* £11.
Also to the same Thomas for beating 27 scucheons of the King's arms @ 10*d.* 22*s.* 6*d.*
Also to the same Thomas for beating 7 scucheons of the arms of St. George @ 3*d.* 21*d.*
Also to the same Thomas for beating two trappers, namely of the arms of St. Edward and another of (the arms) of St. Edmund, @ 40*s.* £4.
Also to the same Thomas for beating of a tunic of the King's arms 20*s.*
Also to the same Thomas for beating of eight banners of the King's arms @ 10*s.* £4.
Also to the same Thomas for beating of sixteen banners of the arms of St. Edmund and St. Edward @ 8*s.* £6. 8*s.*
Also to the same Thomas for beating of a shield of the King's arms 20*s.*
Also to the same Thomas for the painting of a crest and of a helm for the King 33*s.* 4*d*
Also to the same Thomas for making six crests of the arms of St. George for six horses @ 20*d.* 10*s.*
Also to the same Thomas for beating of the said saddles 4*s.*
Also to the said William Cantelow for five pieces of blue tartarin @ 26*s.* 8*d.* £6. 13*s.* 4*d.*

Total £50. 1*s.* 7*d.*

Given at Westminster the 11th day of March the first year [1422-3].[1]

Now what is the meaning of this account? I think it points, first, to the provision of such new things as were deemed necessary to freshen up the funeral pageant, after its two months' journey through France, for its passage through Kent and London; and secondly, but chiefly, to the decoration, over and above the wax chandlery of Simon Prentot, of the seven herses, which had to be ready against the arrival of King Henry's body in England.

As regards the first point, it will be noticed that whether on account of our hilly roads, or for the more honour and glory of the pageant, the charet was now to be drawn by two more horses than when in France, for the account definitely mentions the making of six 'crests' with St. George's arms for six horses, and the covering of six traces for the charet, thus confirming Hall's statement. Two new trappers were also made with the arms of St. Edward and St. Edmund. For these and the covering of the traces five pieces of rich blue tartaryn were bought.

The rest of the items, with the exception of four bastard saddles with their harness, clearly belong to the herses. Thus the account provides for twenty

[1] For the Latin text, see Appendix C.

pieces of short (or narrow) black buckram, and nine pieces of long (or broad) buckram. From these were probably taken the 220 ells for the valances of the herses that were 'beaten' or decorated with gold by Thomas Daunt. The scutcheons of the arms of the king and of St. George, the eight banners of the king's arms, and the sixteen banners of St. Edward and St. Edmund, were no doubt for the decoration of the herses, which would include the tunic and shield with the king's arms beaten by Daunt, and the crest and helm that he painted. All these ornaments could easily be transported from place to place, as the procession moved on, but the valances covering the herses and their barriers, and the canopied framework of tapers set up by Simon Prentot, were probably separate works at each station.

Both chronicles and documents have now brought us to Westminster, where we can continue the story by the help of the account rolls of the sacrists of the Abbey; and the story that they tell is both interesting and instructive.

The most important of the rolls which have been preserved is that of Roger Cretton, sacrist, for the period from Michaelmas, 1422, to the same date in 1423.

The first of his payments is of £18 6*s.* for the making of sixty wax torches, which were decorated with arms and shields for 3*s.* 11*d.* more. As the amount of the wax was 874 lb., each torch must have weighed about 14½ lb. They were carried by sixty poor men in black gowns and hoods, who received a shilling apiece for their labour.[1]

Next comes a payment of 8*d.* to two men carrying copes to a garden formerly belonging to the Friars Preachers, whose house was at Blackfriars. The copes were, no doubt, for the use of the monks, who seem therefore to have met the procession either at St. Paul's or Ludgate, and, with the sixty torch-bearers, convoyed it to Westminster.[1]

For this, the last stage of its journey, the king's body was again drawn by four horses only, in new trappers with the king's badges, instead of hitherto with his arms.

On arrival at the Abbey the doors of the church were thrown open, and the procession entered, the charet with the coffin, followed by the mourners, being drawn by the four horses up the new nave, now nearly finished through

[1] Expense facte circa interiamentum domini regis

In lx Torchys emptis ponderantibus viij^{c} di. xxiiij lb. Cere precium Centene xlij*s.* et precium libre iiij*d.* ob.	xviij li. vj*s.*
In lx pauperibus amitis togis nigris portantibus dict. lx torchis	lx*s.*
Et solut. pro armis et scutis firmatis super dictis Torchys	iij*s.* x*j*d.
Et solut. iij hominibus portantibus capas usque ad gardinum quondam fratrum predicatorum	viij*d.*

the munificence of the dead king himself, to the entrance of the quire. In connexion with this Roger Cretton's account has:

In carrying sand and to labourers hired for making a way for bringing in horses into the church, and for straw and hay bought for strewing upon the said way 4*s.* 4*d.*[1]

At the quire door the representation of the king and his coffin were taken from the charet and borne up to the presbytery, where they were laid within the sumptuous herse which Simon Prentot had set up, probably on abbot Richard of Ware's mosaic pavement before the high altar.

Of the herse itself no description has come down to us, but it no doubt closely resembled that set up on the same spot a hundred years later for abbot John Islip. The sacrist's account tells us that it was railed in, like Islip's herse, by barriers covered with black cloth, and we may assume that the sixty poor men with their great wax torches stood round about it.

It would be interesting to know how far the dead king's own wishes with regard to the herse had been carried out. In a will which he executed at Southampton in June 1415, on the eve of his departure for France, King Henry says:

As regards our funeral ceremonies and the expenses of our burial, we place everything at the discretion of our surveyors and executors; so that the honour of the royal dignity may be kept, and superfluity that is to be condemned may be avoided.

We will, nevertheless, in particular, that on our more solemn herse which will serve on the day of our burial, there be amongst the others three tapers more excellent than the rest, of one size and form; five less than those three, of one size and form; seven less than those five, of a size; and fifteen smaller than the seven, also of a size.[2]

How these thirty tapers could be symmetrically arranged I leave to the ingenuity of others to show.

There is nothing in the accounts to tell how long the great herse remained standing, though we may assume that it did so until after the month's mind, the only entry relating to it being a payment of 2*s.* 8*d.*

In expenses made upon the chandelers working about the herse and in taking down of the same.[3]

[1] In zabulo cariando et laborariis conductis pro via facienda pro equis introducendis in Ecclesiam et pro stramine et feno emptis super dictam viam struendis iiij*s.* iiij*d.*

[2] Item quoad Funeralia et Sumptus sepulture nostre omnia ponimus in supervisorum et executorum nostrorum discretione: Ita quod Dignitatis Regie conservetur Honor et damnanda superfluitas evitetur. Volumus tamen in speciali quod in Hersia nostra solemniori que serviet in die sepulture nostre sint inter ceteros tres cerei excellentiores ceteris unius quantitatis et forme, quinque minores illis tribus unius quantitatis, septem minores illis quinque unius quantitatis, et quindecim minores septem unius quantitatis. (Rymer, *Foedera*, ix, 289.)

[3] In expensis factis super Candelarijs operantibus circa herciam et in deposicione ejusdem ij*s.* viij*d.*

There are a few other entries that may be quoted[1]:

In bread, beer, and fishes bought for the watchers in the church and the archdeacon's chamber[2] 5*s.* 4*d.*

In beer bought for the ringers and in pence given to them 16*d.*

In the mending of four basons of silver[3] against the interment 3*s.* 4*d.*

In reward made to John Grenewych and to the laundress of the vestry for their great labour on account of albes and other vestments soiled at the funeral of the lord Kyng 2*s.*

On the back of Roger Cretton's roll is a series of entries of the greatest interest, relating not only to purchases connected with his own office, but giving full particulars of the things used at the funeral, which became, as was customary, the perquisites of the Abbey through having been brought into the church.

First he notes the purchase of two 'torchys' for the high altar, and of the sixty torches already noticed that were bought for the king's funeral.[4]

Under the heading of 'timber' he has two loads on hand. Also by purchase 12 loads of oak timber, and 12 loads of elm timber, 'and from two loads of oak timber from the barriers made to keep the herse at the time of the burial of the lord King Henry V, as appears below'.[5]

Next comes a list of the gold cloths (*panni aurei*) that were offered on behalf of the King and Queen Katharine (neither of whom was present), and by the lady Joan 'formerly queen' and twenty other lords and ladies of the realm. The heading is of interest as giving us the exact day of the king's burial.

Received 222 gold cloths offered both on Friday on the feast of St. Leonard the abbot at *Placebo et Dirige* and at mass on the morrow on the day of the burial of the lord Henry the fifth formerly King of England.

Since St. Leonard's day is, and has always been, kept on 6th November, King Henry was buried, as already stated, on Saturday the 7th.

[1] In pane cervisia et piscibus emptis pro vigilantibus in Ecclesia et in Camera Archidiaconi vs. iij*d.*
In cervisia empta pro pulsantibus et in denariis datis eisdem xvj*d.*
In emendacione iiij ollarum de argento contra enteramentum ij*s.* iiij*d.*
In remuneracione facta Johanni Grenewych et lotrici vestibuli pro eorum magno labore pro albis et aliis vestimentis detropatis in funeracione domini Regis ij*s.*

[2] Now the muniment room in the south transept.

[3] Probably the four that were hung athwart the shrine of St. Edward.

[4] Torchys. De empcione ut infra ij Torchys pro Magno Altari. De empcione pro interamento domini Regis Henrici v^ti^ nuper Regis Anglie lx torchys
Summa lxij Torchys.

[5] Meremium. De Reñ ij lodys meremij. De empcione ut infra xij lodys meremij querrum. Et de empcione ut infra xij lodys meremij ultima. Et de ij lodys meremij querum provementibus de barreris factis ad salvandam herciam tempore interamenti domini Regis H. v^ti^ ut patet inferius
Summa xxviij lodys meremij.

Of the 222 gold cloths, Queen Joan redeemed the twenty-four offered by herself by payment of £33 6*s.* 8*d.*; three more were delivered to the Lord Bourchier; and the Earl of March compounded for the thirteen offered by him in his absence with a gown of cloth of gold of Damascus. The remaining cloths were delivered into the vestry.[1]

The entries that follow are of special importance as regards the funeral pageant itself.[2]

First, the sacrist notes the receipt, from the offering, of the four horses, with their bridles, which were delivered to the lord abbot. Also from the offering, of four saddles, probably the four bastard saddles bought of William Caudewell, and 'beaten' by Thomas Daunt. These were delivered to the sacrist.

Next, from the offering, is received a sword with all the arming for a man with one 'cote armor', which were delivered to the keeper of the vestry. This was evidently the equipment of the earl who rode fully armed in the procession before the bearer of the standard, on a horse with a velvet trapper of the king's arms. This we meet with in the next item:

> Trappers. From the offering: one trapper of blue velvet with windmills and antelopes of gold.
> And a trapper of red and black velvet with white swans.

[1] See the complete list in Appendix D.

[2] Equi cum frenis. De oblacione: iiij equi cum iiij frenis. Et liberantur domino Abbati.
Selle. De oblacione: iiij selle. Et liberantur Sacriste
Arma. De oblacione: j gladius cum tota armatura pro j homine cum j cote Armur'. Et liberantur Custodi vestibuli.
Trapper. De oblacione: j Trapper de blodio velewet cum molendinis ventricijs et Antalopis de auro
Et j Trapper de rubeo et nigro velewet cum cignis albis
Et j Trapper de nigro velewet cum pennis albis vocatis Ostrych feders.
Et j Trapper de blodio et rubeo velewet cum armis Anglie et Francie
Et de j Trapper recept. postea de executoribus domini Regis de viridi velewet cum antalopis super j stage cum ramis aureis
Summa —— v Trappers pro equis.
Inde liberantur executoribus domini Regis ij Trappers
Et liberantur Custodi vestibuli iij Trappers.
Summa —— iij Trappers.
Vexilla. Et recept. de iiij vexillis magnis. Et de xv vexillis parvis
Et liberantur Custodi vestibuli
[Summa. —— xix vexilla magna et parva *erased.*]
Pensyles. Et recept. de xxxix pensyles Et de j panno de trinitate Et de cxx virgis de volantys (*in duplicate roll* valantys)
Summa xxxix pensyles et j pannus de trinitate et cxx virge de volantys.
Et liberantur Custodi vestibuli.

And a trapper of black velvet with white feathers called 'Ostrych feders'.
And a trapper of blue and red velvet with the arms of England and France.
And a trapper received afterwards from the lord the King's executors of green velvet with antelopes upon a stage with gold branches.

Of these five trappers, two were returned to the king's executors, and three, which, as will be seen presently, included the blue and the green ones, were delivered to the keeper of the vestry.

The vestry also received four great banners, probably those carried by the four lords, with the arms of St. George and of the King, and with images of the Trinity and our Lady, as described by Thomas of Walsingham; also fifteen little banners, probably those of St. Edward and St. Edmund beaten by Thomas Daunt.[1]

The vestry further received thirty-nine 'pensyles', a cloth of the Trinity, probably from the charet, and 120 yards of valances.[2]

The ornaments of the boiled leather representation of the king that lay upon his coffin come next, and are fully described as follows[3]:

Mantle, gown, and kirtle — Also received one long mantle of purple velvet and a gown of the same suit, and a little gown called 'curtyl'.
And they are delivered to the Keeper of the Vestry.

Furring. — Also a furring of ermine from the mantle containing (*blank*) and two furrings of minever from gowns containing within 57 'tymberys' and 12 'wombys'.
And they are delivered to the Keeper of the Vestry.

[1] See note 2 on preceding page.

[2] *Ibid.*

[3] Mantellum toga et curtyll — Et recept. de j mantello largo de [purpura *altered to*] velveto purpureo Et de j toga de eadem secta Et j parva toga vocata curtyl.
Et liberantur Custodi vestibuli.

Furrura. — Et de j furrura de Ermyn de mantello continente [*blank*]
Et de ij furruris de Menyver de togis continentibus intra lvij tymberys et xij wombys.
Et liberantur Custodi vestibuli.

Ornamenta auri et argenti super ymaginem de Carbyl. — Et recept. de j corona argentea et deaurata cum diversis lapidibus et perlys ponderis .l. unciarum et di.
Et de j sceptro longo argenteo et deaurato ponderis xx unciarum
Et de parvo sceptro cum pila et cruce argenteo et deaurato ponderis v unciarum et di.
Et de ij armillis argenteis et deauratis cum perlys et lapidibus ponderis xvij unciarum et di.
Et de anulo cum lapide precioso ponderis
Et totum liberatur Custodi vestibuli.

Ornaments of gold and silver upon the image 'de Curbyl'

Also received a crown of silver and gilt with divers stones and 'perlys' weighing 50 ounces and a half.
Also a long sceptre of silver and gilt weighing 20 ounces.
Also a little sceptre with a ball and cross of silver and gilt weighing $5\frac{1}{2}$ ounces.
Also two armils of silver and gilt with 'perlys' and stones weighing $17\frac{1}{2}$ ounces.
Also a ring with a precious stone weighing —
And all delivered to the Keeper of the Vestry.

Lastly, the sacrist accounts for the receipt of the two loads of timber already mentioned derived from the barriers made for the keeping of the herse, and for four score and three yards of black cloth hanging about the herse.[1]

The sacrist himself kept the timber, but the cloth was divided between the subsacrist, who had four yards, the keepers of the church, who received ten yards, and the rest among poor people and servants.

Some additional information may likewise be gleaned from the foreign receipts on Roger Cretton's roll.[2]

First he has

Also from a fine made with the executors of the lord King Henry the fifth for the herse and two hundred torches being in the church at the time of the said King's funeral. £53 6*s.* 8*d.*,

but he adds, 'Nothing so far because it has not yet been paid.' This amount may be compared with the £59 16*s.* 8*d.* which was the cost of King Edward III's

[1] Meremium. Et recept. de ij lodys meremii provenientis de barruris factis pro salvacione hercie. Et liberantur sacriste.

Pannum nigrum. Et recept. de $\overset{xx}{\text{iiij}}$ et iij virgis panni nigri pendentis circa herciam.

Summa $\overset{xx}{\text{iiij}}$ iij virge

Inde liberantur subsacriste iiij virge Et custodibus Ecclesie x virge Et distribute inter pauperes et servientes lxix virge.

[2] Recepcio forinseca. Et de fine facto cum executoribus domini Regis Henrici quinti pro Hercia et .ij.^{c} torches existentibus in Ecclesia tempore funeracionis dicti Regis de liij*li.* vj*s.* viij*d.* nihil adhuc quia non dum soluto.

Et Recepta de domina Iohanna nuper Regina Anglie pro quodam fine facto cum eadem pro xxiiij pannis aureis oblatis in obsequiis domini Henrici quinti nuper Regis Anglie xxxiij*li.* vj*s.* viij*d.*

Et Recepta pro iiij^{c} et dj. libris cere venditis pro sustentacione iiij cereorum continue ardencium per CC $\overset{xx}{\text{iiij}}$ xvij dies circa tumbam domini Regis Henrici quinti hoc anno ix*li.*

Et Recepta pro xxiiij torches accommodatis et pro vasto eorundem in anniversario ejusdem domini Regis ardencium tam ad dirige quam ad missam magnam hoc anno xl*s.*

Et in xx lb. cere venditis per subsacristam hoc anno precium libri v. x*s.*

horse, and the £66 13*s.* 4*d.* which the Abbey had received in place of the herse for Queen Anne of Bohemia.

The second item in the receipts deals with the redemption already noted by Queen Joan of the cloths offered by her.

The third item accounts for £9 received for four hundred and a half pounds of wax sold for the keeping of four tapers continually burning for 207 days about the king's tomb; and a fourth item for 40*s.* received for twenty-four torches lent, and for waste of the same, burning on the anniversary of the lord king both at dirige and high mass this year; 10*s.* were also received by the subsacrist for twenty pounds of wax sold by him at 5*d.* a lb.

There is one more question that may be discussed in this part of my paper, namely, what were the badges of King Henry V?

It has already been pointed out that for the last stage of the funeral procession from St. Paul's to Westminster, the four horses that drew the chariot carried new trappers with the king's badges instead of arms: namely, of black with 'ostrych feders', of red and black with white or Bohun swans, of blue with windmills and antelopes of gold, and of green with antelopes upon a stage with gold branches.

The account for the provision of these is not yet forthcoming, but there is a curious confirmation of the use of the blue and green trappers, were such needed in face of the sacrist's record, in another quarter.

There is printed in *The Antiquarian Repertory*[1] an account of the ceremonies and services at Court in the reign of King Henry VII from a manuscript formerly in the possession of Peter le Neve. One of the sections that deal with the honours to be paid to a dead king is as follows:

As ffor the Trapers.

Item in conveyinge over of King Henry the V^th^ out of France into Englond, his coursers were trappid with trappers of party coloures: one sid was blewe velwet embrodured with antilopes drawenge in mills, the tother sid was grene velwet embrowdered with antelopes sittinge on stires with long flours springinge betwene the hornes; the trappers after, by the comandment of Kynge Henry the vj^th^ were sent to the vestry of Westm; and of every coloure was mad a cope, a chesabille and ij tenacles; and the orfereys of one coloure was of the clothe of o^{r} coloure.

Now reference to the great inventory of the jewels and ornaments of the Abbey which was taken at its suppression[2] reveals these items:

[1] 2nd ed., i, 311.

[2] M. E. C. Walcott, 'The Inventories of Westminster Abbey at the Dissolution,' *Transactions of the London and Middlesex Archaeological Society*, iv, 313.

A cope a chezabull ij tunycles without stolles and phanams of blewe velvett enbrotheryd with anteloppes and mylles of gold the orpherys of grene velvett of the gyfte of Kyng Henry the IV^th^.

Another cope and chezabull ij tunycles of grene velvett with the orpherys of blewe velvett wyth anteloppys and mylls and with a stoll and a phanam of grene velvett with rossis and slyppys and an albe to the same belongyng of the gyfte of Kynge Henry the V^th^.

The ascriptions of the donors are not very exact, but there cannot be any doubt that these vestments were made from two of the trappers of the horses which brought King Henry's body into the Abbey, as stated in Peter le Neve's MS.

There is nothing in the inventory that can be identified with the black trapper with ostrich feathers or the red and black one with white swans. This is not, however, an important matter, since there can be no question that King Henry used as a badge the white swan of his mother, Mary de Bohun, nor is there any difficulty as to the ostrich feathers.

But the use of the antelope under two differing aspects is matter for discussion. That the king actually did so is confirmed by the account given by Hall of the meeting of Henry with the French king at Melans in 1419, where

the King of Englande had a large tent of blewe velvet and grene, richly embrodered with two devices, the one was an Antlop drawing in an horse mill, the other was an Antlop sitting in an high stage wyth a braunche of Olife in his mouthe. And the tente was replenyshed and decked with this poyse:

After busie laboure commeth victorious reste,

and on the top and heygth of the same was set a greate Egle of gold, whose iyes were of suche orient Diamondes that they glystered and shone over the whole felde.[1]

The king's 'poyse' here evidently has reference to his badges: the antelope drawing in a horse-mill representing the 'busie laboure', while the same beast sitting in a high stage signifies the 'victorious reste'. It likewise seems probable that under the guise of an antelope is King Henry himself. There is, however, this curious fact, that whenever the king's badges are enumerated elsewhere, they usually include a beacon, and as often omit the horse-mill. For the meaning of this beacon various fanciful reasons have been invented, but the point we have to consider is its actual origin.

Now on the king's chantry chapel (see *post*) both the swan and the antelope, with crowns about their necks to which chains are attached, occur many times. In the cornice over the altar, and on the north side of the chapel, both creatures are secured by their chains to what are undoubtedly beacons, in the form of a blazing tar-barrel fixed on a pole, with cross-pieces to steady it, and a ladder up

[1] Edward Hall, *The Union of the two noble and illustre famelies of Lancastre and Yorke*, etc. (London, 1548). The Victorious Actes of Kyng Henry the fifth, fol. xxxiii, *dors.*

to the barrel. On the south side of the chapel the creatures are not fastened to a beacon, but to a bush or tree. We have here, therefore, the antelope again under two differing aspects: chained to a beacon, and chained to a tree, but how can this be reconciled with his drawing in a mill and resting from his labour? The question is complicated by the further fact that when attached to the beacon the antelope is resting on the ground, and when chained to the tree he is sitting on his haunches.

Since we can hardly assume that King Henry V is here given an entirely new badge, I venture to suggest that the carver has blundered, first by substituting a beacon for the horse-mill, which is quite intelligible, and then in the pose of the antelope, a mistake that would naturally follow the other, especially in view of limitations of space. The carver probably worked from a rough sketch or 'plat' which had been supplied to him, and since the chapel was not begun to be set up until nearly thirty years after King Henry's death, it is easy to believe that the meaning of his antelope badge had by then been forgotten, and the horse-mill corrupted into a beacon.

There is another treatment of the king's antelope badge which seems also to have escaped notice. It is to be found in the panels of the vault that carries the chantry chapel over his tomb, and represents an antelope lying down upon the ground, with a towel or napkin about his neck and flung upwards (see fig. 3). The napkin is shown as embroidered with fleurs-de-lis of France and the leopards of England. I know of no other instance of this curious device, but it may be compared with the boar with an armorial mantle attached to his collar, which occurs on the seal of the mayoralty of Calais, and with the lion with a similar mantle of the royal arms to be seen on coins of Edward III.

II. The Tomb or Monument of King Henry V.

The place of King Henry's burial is indicated in general terms by Thomas of Walsingham's description of it as

inter Reges Angliae ibidem, inter feretrum sancti Edwardi et Capellam sanctae Virginis, loco quo reliquiae ibidem fuerant reconditae.

These are almost the words of the king himself, for in the will that he made in 1415 he says:

legamus corpus nostrum sepeliendum in ecclesia beati Petri Westmonasterii, apostolorum Principis, inter sepulturas Regum, in loco in quo modo continentur Reliquiae Sanctorum.

Now in 1415 the chapel of St. Edward behind the high altar contained six principal tombs: those of Queen Eleanor, King Henry III, and King Edward I, on the north; and those of Queen Philippa, King Edward III, and of King

Richard II and Queen Anne, on the south. These stood as now between the pillars of the arcade about the chapel, while in the midst was the shrine containing the body of St. Edward himself. The easternmost arch, that at the foot of the shrine, did not contain any tomb, but under it stood the altar of the Holy Trinity, and the almery or almeries in which were kept the relics belonging to the church.

The king's directions, as will be shown presently, provide for the moving of the relics into another place, but they say nothing about the altar, which continued to stand much upon the same spot that it had occupied since this eastern part of the church was hallowed in 1269.

As there is no reason for supposing that the altar platform extended further eastwards than those carrying the royal tombs, there could not have been any room behind the altar for King Henry's grave. But whatever difficulty existed on this head was probably met, first by moving the altar a little further westwards, and then building out behind it into the ambulatory a platform to enclose the grave and carry the king's tomb.

This platform projects 4 ft. 9 in. into the ambulatory, with a broad front towards the east of 17 ft., cased throughout with large slabs of Purbeck marble. The front is 5 ft. 9 in. high, and consists first of a single plinth 1 ft. 11 in. deep, then a broad band of panelling, and finally a moulded cornice 15 in. deep. The broad band has a row of seven sunk panels, each 2 ft. 7 in. square, ornamented with a large doubly cusped quatrefoil with smaller quatrefoils in the corners (fig. 1). The ends of the platform are treated in the same way, but have only one panel. In the middle of each panel is a hole, now filled up, for fixing shields or other devices in metal; but such shields could not have been wider than $6\frac{1}{2}$ in., unless they overlapped the cusping, like those on King Edward III's tomb. The cornice has traces of red colouring along the upper edge, and in the uppermost hollow is painted in Roman capitals this inscription:

HENRICVS QVINTVS (scroll) GALLORVM MASTIX IACET HAC HENRICVS IN VRNA 1422 DOMAT OMNIA VIRTVS (scroll) PVLCHRA VIRVMQ3 SVVM SOCIAT TANDEM CATHARINA 1437 OTIVM FVGE[1]

The top of the platform extends westwards for 12 ft. $2\frac{1}{4}$ in., to a step which raises it above the floor of St. Edward's chapel. Its surface is somewhat patched, but originally was floored throughout with Purbeck marble slabs $17\frac{1}{2}$ in. square.

In the middle of the platform stands the king's tomb.

Before describing this it will be convenient to refer to several documents that bear upon it.

[1] These last two words are painted over an earlier set of letters which seem to be OMOBVSA.

Fig. 1. The tomb-platform and monument of King Henry V in 1914

On the Issue Roll for Easter 10 Henry V are two important entries, both dated September 26, 1422:

xxvj die Septembris [1422]

Johanni Arderne Clerico operacionum Regis. In denariis sibi liberatis per manus Willelmi Pierson pro xxxvj doliatis petre de Caune ab eo emptis pro tumba Regis H. quinti infra ecclesiam beati Petri Westmonasterii fienda et ibidem sepeliend. xij*li*.

Johanni Arderne Clerico operacionum Regis In denariis sibi liberatis per manus proprias pro[1] factura tumbe Regis H. quinti infra ecclesiam beati Petri Westmonasterii fiende et ibidem sepeliend. xxiij*li.* vj*s.* viij*d.*[2]

The question now arises, to what do these entries refer? The Caen stone had been supplied and the work carried out, and the date in September shows that it was while King Henry's body was yet in France. For my own part I have little doubt that the work done was the building out of the platform beyond the Trinity altar; that it was done in Caen stone, which was afterwards cased with Purbeck marble; and that because the platform enclosed above ground the vault for the dead king's body the whole construction is spoken of as his *tumba* or tomb, and not as his grave.

For confirmation of all this let us turn once more to the account roll of Roger Cretton the sacrist.

Among the 'expenses done about the interment of the lord King' is a payment of 18*s.*

For bread and beer and cheese bought for the carpenters, masons, daubers, tilers, and those serving them, working about the tomb and about the new building of the almonry house for seven weeks.[3]

This entry, and that relating to the sand, straw, and hay laid down in the church for the funeral procession, are both crossed out and a note made in the margin that the charges are to be paid by the king's ministers and executors, but that does not minish the force of the entries nor the story they tell.

Further on the sacrist has other payments:[4]

In bread, beer, and other victuals bought for those staying in the Sacristy all the time of the making of the lord King's tomb 4*s.*

In a reward given to Robert Cowper the chief carpenter of the work of the aforesaid tomb 10*s.*

Also paid for part of the ironwork at the end of the tomb of the lord King, besides 20*s.* paid to the accountant, 8*s.*

In 4 pounds of wax candles and 10 pounds of tallow bought 2*s.* 2*d.*

[1] In the duplicate roll (no. 404) 'super' occurs instead of 'pro'.

[2] Issue Roll (Pells) 10 Henry V, Easter, no. 403, m. 19.

[3] 'In pane et cervisia et caseo emptis pro carpentariis cementariis daubatoribus tegulatoribus et eorum servientibus operantibus circa tumbam et circa domum elemosinarii de novo edificandam per vij septimanas xviij*s.*'

[4] 'In pane cervisia et alijs victualibus emptis pro supervenientibus in Sacristia toto tempore facture tumbe domini Regis iiij*s.*

In rewardo facto Roberto Cowper capitali Carpentario operis predicte tumbe x*s.*

Et solut. pro parte ferramenti ad finem tumbe domini Regis ultra xx*s.* solutos computanti viij*s.*

In iiij libris candelarum de cera et x libris de cepo emptis ij*s.* ij*d.*'

All these entries relate to the preparations for the funeral, and it will be noticed that the references are to the king's tomb, as in the entries relating to John Arderne. We also learn that an iron railing of some kind was fixed about the edge of the platform, probably for the protection of those actually concerned with the king's burial.

In order to test the question of the tomb-platform Bishop Ryle most obligingly allowed Mr. Lethaby and myself, so lately as Candlemas Day just past, to make an examination of the site by taking up a damaged strip of flooring which needed repair on the south side of the king's tomb. We found beneath what we expected, an apparently solid mass of concrete formed of pieces of chalk, Caen stone, and Kentish rag, with traces of coursed layers of Caen stone behind the marble casing. No attempt of course was made in the direction of the king's grave, but in working westwards other interesting discoveries were made. One was the continuation of the marble pavement of St. Edward's chapel as far east as a bedding of thin tiles for the original step of the Trinity altar, on a line 3 ft. 9 in. beyond the present step of the tomb-platform. Another discovery was that a length of the marble step, 5 in. thick, of the Trinity altar itself had apparently been used as the support for King Henry's tomb. And a third matter of interest was the bringing to light, after being covered up by the tomb-platform since about 1430, of the end of little Margaret of Valence's slab, with the remains of its brass cross and inscription in inlaid letters. We also proved that the adjoining slab of her brother John, that with the remains of white and gold mosaic, had lost its eastern extremity, probably through its having been broken off in the making of King Henry's grave.

The tomb or monument eventually set up over the grave, and still in its place, is 7 ft. 3 in. long, 3 ft. 5½ in. broad, and 3 ft. 6¼ in. high, and all of Purbeck marble (see fig. 1). It consists of a plinth ornamented with a row of small square panels like those about the platform, with a series of arched recesses above, and a moulded cornice. Each end has angle buttresses, and contains instead of a recess one broad and shallow panel with flattened head and rounded upper corners, each with two cusps, with three quatrefoiled panels below. The sides are divided by buttresses into three bays, each containing a recess with two panels under. These recesses are 20 in. wide and 8 in. deep, and oblong in plan, with panelled roofs and sides, and plain slabs at the back, all of Purbeck marble. The recesses have the same flat heads and cusped rounded corners as the end panels. They are also all in their original state, and show no traces of fixings or attachments of any kind, and the bottoms have no signs of mortar or cement. It is difficult, therefore, to see what could have been placed in them, other than groups of imagery that simply stood unfixed of their own weight.

The whole tomb has at some time been limewashed or distempered all over.

Upon the top lie the wooden bed and core of the king's effigy. The bed consists of a narrow frame of oak board about an inch thick carrying a deep and solid block of oak 5 in. thick, with plain chamfered edges 6 in. broad, probably for a long rhyming inscription like that on the tomb of Edward prince of Wales at Canterbury. The top of this forms a bed 6 ft. $2\frac{1}{2}$ in. long, and 2 ft. 5 in. broad, on which now lies loose the core of the effigy (fig. 2). This, like the under block, is solid, and not hollowed out beneath like the earlier wooden effigies. It has unfortunately lost the head, which rested on two pillows, but clearly represented the king in the gown, hooded tippet, and mantle that formed his parliament robes. The arms were laid by the sides, as in King Edward III's effigy, and the hands, like his, held the two sceptres. The feet, which are carved with some care and show the thin soles of the shoes, are worked out of separate pieces of oak, pegged on to the trunk. The feet, like most of the Westminster royal effigies, rested against two beasts, now lost, for which deep hollows are left, each with two large peg holes at the bottom. The hands were likewise worked separately and pegged on to the wrists, which show the close cuffs of the gown sleeves. The head was also a separate work. In the bed block on each side of it are a number of plug holes right through the block, evidently for fixing the usual figures of angels that supported the head pillows.

Fig. 2. Wooden core of the monumental effigy of King Henry V.

The whole of this woodwork was entirely covered originally with plates of silver-gilt, carefully fitted to every part of the effigy and its adjuncts. The head and the hands, as well as the angels at the head and the beasts at the feet, were probably finished castings, as were no doubt the sceptres. The crown upon the king's head was probably wrought or hammered work.

Of all this sumptuous decoration nothing now remains, but the holes for the silver nails or pins by which the plating was fixed can be seen along the edges of the mantle and elsewhere, and there are still several bits of

silver nails in the thick bed-plate, which proves that it too was cased with metal.

Although the king's effigy has long been despoiled, several interesting facts about it are forthcoming, and, as usual, from unexpected quarters.

Among the many account rolls and other documents of the officers of the monastery, now among the muniments of the Dean and Chapter of Westminster, are several belonging to the office of the shrine-keeper.

One of these is an indented inventory of all the jewels, books, etc. that were handed over on 21st December, 1467, by Dan Thomas Arundell, late keeper of St. Edward's shrine and of the relics of the church, to his successor Dan Richard Tedyngton. With this interesting document in general, which includes a list of all the relics, we have at this present nothing to do, but at the end are enumerated the ornaments of the altar of King Henry V, which was also in the care of the shrine-keeper. This concludes with the following noteworthy item:

Also þ^e^ tombe of Kyng Harry þ^e^ V^th^ is complete save iij hoole flourdelyce and ii myddylpoinctes of flourdelyce and ij lyons and a half oñ ij angelys a balle and a crosse of sylver and gylt a septre and a antilloppe of silver and gylt ij tethe of gold hangyng by a wire apon the handde of þ^e^ ymage of Kyng Harry þ^e^ V^th^ which were stole.

In 1479, when Dan Richard Tedyngton handed over his office to Dan John Watirden, a similar inventory was again made, which concludes, as before, with a note upon King Henry's tomb, but in slightly different terms:

Also the Tombe of Kyng Herry the Vth is complete with two teeth of golde on his hande Except iij hole flourid de lice and ij middlepoynt of flours de lice And ij lyons and an half. Two angels. A Balle and a crosse of Silver and gilt. A septre and an antelop also of silver and gilt. Alle the whiche were stolen awey in the tyme of the seid Dan Richard Tedyngton.

These last words clearly imply, as the 1467 inventory shows, that the effigy had already been robbed of many of its ornaments when Richard Tedyngton became shrine-keeper. Of the exact date there is, however, at present, no record.

The lost ornaments, it will be noticed, included the angels at the head and the lions under the feet; the two sceptres, namely that with the cross and the rod with the dove; and portions of the crown, which was probably constructed of alternating fleurs-de-lis and crosses, with intermediate smaller fleurs-de-lis. A silver-gilt antelope was also missing, but it is not easy to say where it had been fixed.

In the Suppression Inventory of the Abbey, the tombs then in the chapel of St. Edward are enumerated, including 'one other of Henry the V^th^ of sylver'.

The effigy was finally stripped of its silver-gilt plates and reduced to its present condition in 1545–6, when the following note is entered among the Acts of the Privy Council:

1545–6, 30th January.

Commission was geven to Syr [Thomas] Moyle and Syr Thomas Pope to make serche and inquisition after suche persones as of late had broken in the nyght season into the Churche of Westminstre, and robbed away the Ymage of King Henry of Monmouth, being all of sylver plates.[1]

Two days later occurs this:

1545–6, 1st February.

The Balif of Westminster and some of the goldsmiths of London having taken certeyne persons with parte of the sylver plattes stollen at Westminster Church, were appoynted to repayre to Sir Thomas Moyle and Sir Thomas Pope, and enforming them of the premisses, require them to travail for the further examynacion thereof according to thordre taken with them in that behalf.[2]

What further took place is not recorded.

In view of the remarkable character of King Henry's monument it is unfortunate that nothing should positively be known either of its history, or of the craftsman who wrought the silver-plated effigy, or of the marbler or mason who made the tomb on which it lies and cased the platform with marble. No accounts, moreover, referring to the monument have yet been found, and if, as is probable, the work was done for the king's executors, possibly none is likely to be forthcoming.

That the marble work has a common origin is plain enough when tomb and platform are compared, but what is equally interesting to note is that the quatrefoiled panels are practically identical with those on the basements of the neighbouring tombs of King Edward III and of King Richard II and Queen Anne. Now the masons who wrought these tombs are known to have been Henry Yevele and Stephen Lote, who contracted for the later tomb in 1395. Yevele died in 1400, but Lote was one of his executors, and lived on till 1417, when his will,[3] in which he is described as 'civis et mason', was proved; he may therefore quite well have been consulted about the marble work of King Henry's tomb. This brings us to its possible date.

Among the documents printed by Rymer are letters patent, dated 28th January, 9 Henry VI (1430–1), directed to Roger Johnson of London, smith, in the following terms:

De fabris arestandis

Rex dilecto sibi Rogero Johnson de London Smyth salutem. Scias quod assigna-

[1] *Acts of the Privy Council of England*, N.S. i, (1542–7) 328. [2] *Ibid.*

[3] P. C. C. 40 Marche. I am indebted to Mr. Wilfrid Hemp, F.S.A., for this information.

vimus te ad tot fabros quot pro factura ferrei operis circa tumulum carissimi domini et patris nostri Regis defuncti infra Abbatiam Westmonasterii faciendum necessarii fuerint ubicumque inveniri poterunt, tam infra libertates quam extra feodo ecclesie duntaxat excepto, pro denariis nostris per te in hac parte prompte et racionabiliter solvendis capiendum et arestandum et eos in operacionem predictam ponendum Et ideo tibi precipimus quod circa premissa diligenter intendas et ea facias et exequaris in forma predicta.

Damus autem universis et singulis vicecomitibus maioribus Ballivis Constabulariis Ministris et aliis fidelibus nostris infra libertates et extra tenore presencium firmiter in mandatis quod tibi in execucione premissorum intendentes sint consulentes et auxiliantes prout decet.

In cujus, etc. Teste Humfrido Duce Gloucestrie Custode Anglie apud Westmonasterium xxviij die Januarij.[1]

Now the making of this ironwork, which, as will be seen presently, was the closure or grate about the king's tomb, seems to mark a final stage in the construction and setting up of the monument. I venture, therefore, to suggest that the year 1431 witnessed the laying of the silver-plated effigy upon the marble tomb, which, with the casing of the platform, had shortly before been placed in position.

III. The Chantry Chapel of King Henry V.

We have next to consider the remarkable chantry chapel that canopies so wonderfully with its bridge-like structure the king's monument which stands beneath it.

It is not generally known that this was planned by King Henry himself while yet in the flesh, and that careful instructions as to its building were duly set out in the will he made at Southampton in 1415. This directs, as we have seen, his body to be buried in the place where the relics are kept, and continues:

ubi volumus supra Corpus nostrum fabricari locum excelsum, per ascensum graduum in uno fine tumbae nostrae, et per descensum graduum ex alio fine; in quo loco volumus dictas reliquias collocari. Et volumus ibidem fundari Altare in honorem Annunciacionis beatae Mariae Virginis et omnium sanctorum, ad quod altare volumus, in perpetuum, singulis diebus, per ejusdem Ecclesiae monachos, dici tres missas . . . Et volumus dictum altare supra tumbam nostram tali modo fabricari quod poterint sacerdotes, inibi celebrantes, a populo videri ut et ejus devotio in Dei laudem ferventius accendatur et Deus in creaturis suis saepius glorificetur.[2]

Seeing that it took eight years to finish and set up the king's monument, we need not be surprised to find, when it is remembered how closely his executors

[1] T. Rymer, *Foedera*, x, 490, from Patent Roll 9 Henry VI, part i, m. 21 *dors.*

[2] T. Rymer, *Foedera*, ix, 289.

and overseers were mixed up in the affairs of the kingdom, that another seven years went by before any steps were taken for the building of the king's chapel.

On March 12, 1437-8, letters patent were directed to William Thornewark, John Brounflete, and Richard Wyley in the following terms:

De petris providendis

Rex dilectis sibi Willelmo Thornewark Iohanni Brounflete et Ricardo Wyley et eorum cuilibet salutem.

Sciatis quod ad construccionem cujusdam operis notabilis et insignis de petra supra et circa tumbam precarissimi patris nostri Henrici nuper Regis Anglie in Ecclesia Sancti Petri Westmonasterii in loco ubi reliquie ejusdem Ecclesie antiquitus locabantur ex assignacione prefati patris nostri decenter humati per ordinacionem executorum ejusdem patris nostri fiendi et cum omni celeritate possibili disponendi cujus quidem operis perfeccionem sinceriter affectamus Assignavimus vos conjunctim et diversim ad qualemcumque petram cujuscunque sit generis ad opus illud necessariam et oportunam ubicumque infra libertates et extra reperiri poterit necnon ad cariagium sufficiens ad eandem pro denariis in hac parte fideliter solvendis prout inter partes racionabiliter poterit concordari de tempore in tempus arestandum et capiendum et petram usque Westmonasterium duci et cariari faciendum. Et ideo vobis mandamus quod circa premissa diligenter intendatis ac ea faciatis et exequamini in forma predicta.

Damus autem universis et singulis vicecomitibus maioribus Ballivis Constabulariis et aliis Ministris nostris quibuscumque infra libertates et extra quorum interest tenore presencium firmiter in mandatis quod vobis et cuilibet vestrum in execucione premissorum intendentes sint consulentes et auxiliantes in omnibus prout decet. In cujus etc. Teste Rege apud Westmonasterium xij die Marcij.[1]

This was followed, on 28th February of the following year, 1438-9, by these other letters patent:

De providendo.

Rex dilectis sibi Willelmo Thornewerk, Ricardo Wildy, Johanni Brumpton et Johanni Stowe salutem.

Sciatis quod assignavimus vos conjunctim et diversim ad petras calcem et omnia alia que pro factura sive construccione tumuli carissimi domini et patris nostri Regis defuncti infra monasterium Ecclesie beati Petri Westmonasterii necessaria fuerint ubicumque inveniri poterunt tam infra libertates quam extra feodo Ecclesie duntaxat excepto ac ad cariagium sufficiens in hac parte tam per terram quam per aquam necnon lathomos laboratores et operarios quoscumque quot in hac parte necessarios fuerint ubicunque inveniri poterunt infra libertates et extra feodo ecclesie dumtaxat excepto pro denariis nostris in hac parte racionabiliter solvendis capiendos arestandos et providendos et dictos lathomos laboratores et operarios in operacionibus tumuli predicti ponendos ad vadia executorum dicti patris nostri moraturos. Et ideo vobis mandamus quod circa premissa diligenter intendatis etc. etc. In cujus etc. Teste Rege apud Westmonasterium xxviij die Februarii.[2]

[1] Patent Roll, 16 Henry VI, part ii, m. 39 *dors.*

[2] Patent Roll 17 Henry VI, part i, m. 17.

The stonework of the king's chapel seems to have made rapid progress, and in the account for the term 16th December, 1440, to Michaelmas, 1441, of Thomas Freston, now sacrist of the Abbey, are several important entries referring to preparations for its being set up:

First, among the expenses, is an item:

paid to divers smiths and carpenters removing and plucking down the closure of iron and wood about the tomb of King Henry the fifth and about the altar of the Holy Trinity on account of erecting the new building in the same place, in all 20*s.*[1]

The same roll also has among the foreign receipts[2]:

And received for the closure of iron and wood standing about the tomb of King Henry the fifth in bulk £6. 13*s.* 4*d.*

And from the wooden closure standing about the altar of the Holy Trinity near (*prope*) the tomb of the aforesaid King, nothing as yet.

It will be noted, first, that the altar of the Holy Trinity, with the wooden screenwork that enclosed it, had remained in place until now; and, secondly, that the wood and iron grate enclosing the king's tomb, set up by Roger Johnson in 1431, was plucked down and sold in 1441, and the screen about the Trinity altar removed with the same intent. Thirdly, it is expressly stated that these things were done *pro novo edificio ibidem erigendo.*

As there are unhappily at present no more documents forthcoming relating to the building of the king's chantry chapel, it must now tell its own story.

It seems to have been begun on the eastern side of the ambulatory by building in front of the vestibule or ante-chapel to the thirteenth-century Lady-chapel an arcade of three arches with intermediate piers. The side openings are narrow and pointed, but the middle arch is wide and four-centred with the hollow of the arch-mould filled with carved leafwork, now much broken. The piers that carry it are left in the rough on the inner sides and show broken ends of iron fastenings: the attached vaulting shafts are also cut away from a few inches below the capitals. These features suggest that the arch was filled with

[1] 'Et solut. diversis fabris et carpentariis removentibus et evellentibus clausuram ferream et ligneam circa tumbam Regis Henrici v[i] et circa altare sancte Trinitatis pro no[vo] edificio ibidem erigendo in toto xx*s.*'

[2] 'Et recept. de clausura ferrea et lignea stante circa tumbam Regis Henrici v[i] in grosso vj*li.* xiij*s.* iiij*d.*

Et de clausura lignea stante circa altare sancte Trinitatis prope tumbam Regis predicti nihil adhuc.' [Roll 19683.]

In the duplicate roll [19682] among the *recepta forinseca* the sale of the grate is entered as: 'De clausura ferrea et lignea stante circa Tumbam Regis H. quinti vendita hoc Anno [vj*li.* xiij*s.* iiij*d. struck out and*] x*li.* [*written over*].

In a list of paintings in the abbey church quoted by Dean Stanley (*Memorials*, p. 640) there occurs: 'Johannes Redyng senior fieri fecit clausuram Altaris Sancte Trinitatis pro xx*li.*'

a screen of some kind, probably of marble. But this has long been removed and the eastern side of the arches is now covered up with work belonging to the later Lady-chapel of King Henry VII, which also forms a buttress behind the piers of the arcade.[1] In line with these piers there was built upon the outer corners of King Henry V's tomb-platform a corresponding pair of responds, behind which the work was continued westward for about 5 ft., not as a solid wall, but with a tall opening on each side with cinquefoiled head. Between these openings and the responds another four-centred arch was built across from north to south, and two others[2] across the ambulatory completed the square. The work was continued by extending the side walls westwards, but, to avoid interference with the great thirteenth-century piers and obtain abutments for the upper works, the walls converge from a first width of $11\frac{1}{4}$ ft. to a second one of 10 ft., and then more sharply to a third of about $8\frac{1}{2}$ ft., where another arch was thrown across; this is, however, pointed instead of four-centred, through being narrower, and springs from corbels carved as angels holding crowns. There were thus formed two divisions: a square one over the ambulatory, and a polygonal one above the king's tomb, both of which were covered with ribbed vaults. The work was continued westward by two tall vices or stair turrets on either side the arch of entrance, built against and partly round the thirteenth-century pillars. These vices led upwards to the space above the two vaults, upon which was raised the king's chantry chapel.

I have ventured to assume that this remarkable structure was built in the order I have described on account of the materials of which it is composed. The pillars of the arcade towards the Lady-chapel, and the responds on the platform, with the work behind them for $3\frac{1}{2}$ ft., are all, up to the springing of the arches, of Purbeck marble. This abuts westwards, with vertical joints on both sides, against walling of a hard white limestone which oversails the straight joints and, with occasional blocks of firestone, is continued upwards to the vault. The hard limestone is also carried westwards through the entrance arch and right round the stair turrets, which are likewise built of it for about 10 ft. upwards. Everything above, including all the arches and upper works, is built of firestone, now in a very crumbling state.

Of the two vaults which form the under-surface of the chapel that over the tomb is a lierne or ribbed vault with traceried panels. The square compartment spanning the ambulatory is practically a fan vault with a stellar centre, with a rich crown about the key, in which is still fixed a large pulley (fig. 3). In each of the

[1] From the way in which the Tudor steps gradually bury the bases of the piers, it seems as if the ante-chapel of the old Lady-chapel was not raised more than about one step above the ambulatory level.

[2] These have broken carving in the hollows like the arch to the east.

Fig. 3. Part of the vault beneath the chantry chapel of King Henry V.

panels towards the cardinal points are carved Bohun swans with chains hanging from crowns about their necks. But the diagonal ribs are flanked by pairs of antelopes lying down, with twisted napkins about their necks, quarterly of the arms of France and England.

The edge of the tomb-platform towards the ambulatory was protected by a tall and close grate of vertical iron bars, as shown by Neale, and more fully by Ackermann. This grate, which was probably set up when the chapel was finished about 1450, was, with many others then in the church, most unfortunately removed by the Dean and Chapter in 1822.

The pointed arch through which the tomb-platform is reached from St. Edward's chapel is happily still closed by another but more elaborate iron grate. This consists of a fixed middle portion opposite the end of the king's tomb, with a narrow gate on each side (fig. 4). It is illustrated in Scott's *Gleanings from Westminster Abbey* and there described by the late William Burges in these terms:

> The construction resolves into a series of upright and horizontal bars halved into one another and riveted together, the main bars, as usual, being much larger and wider than the rest. In front of the smaller ones is riveted a small circular bowtell, which with the bars themselves is bent at the heads of the compartments into semicircular arches. On the sides of all the bars, both large and small, is a wide and very shallow groove, which serves as a rebate for a series of very small bars, each cusped in the middle, thus forming a sort of tracery resembling a series of squares set one upon another, but with a line drawn from each angle. Behind these, again, we find thin sheet iron pierced with pointed trefoils following the lines of the tracery before mentioned.[1]

The grate and gates are joined together across the top by an embattled band, the top of which is 6 ft. 9 in. from the step on which the grate stands. Above this the arch is filled in with open tracery, all likewise of iron, and of curious design (fig. 4).

This protective barrier has for many years past been set down by writer after writer as the work of Roger Johnson in 1431. But a reference to the Patent Roll would have shown that the ironwork for which he was to be responsible was *circa tumulum*, and we know now from the sacrist's account that it was plucked down and sold in 1441. Moreover, in that year the place of the grate under notice was, as we have seen, occupied by the Trinity altar with its closure of woodwork.

Now Sandford in 1707[2] describes the chapel as having been 'fenced with Two Iron-Grates by King *Henry* the Seventh'; a statement repeated by Dart in 1742. It is again made by Carter in 1796 in these words: 'The tomb of this monarch was enclosed by order of *Henry* VII. with grate and gates of iron, finely wrought,' and in a later passage, after referring to the silver head, etc. on the monument, he adds, 'these were all stolen before the tomb was secured, as before mentioned'. I have not been able to verify this statement as to the

[1] G. G. Scott, *Gleanings from Westminster Abbey* (2nd edition, Oxford and London, 1863), 91, 92.
[2] *Genealogical History*, 288.

setting up of the grate by King Henry VII, for which no authority is given by Sandford and those following him; but there seems to be no reason for doubting it, nor for accepting such a date for the ironwork itself. Richard Gough, in his

Fig. 4. Wrought-iron grate and gates at the west end of the monument of King Henry V.

Sepulchral Monuments of Great Britain, published in 1796, also describes the king's tomb as having been enclosed with iron grates and gates. 'The gates,' he says, 'under a handsome pointed arch in the West front have their impost or fascia divided into thirteen compartments, painted alternately blue and red. On each blue space were placed three gilded fleurs de lis, and on each red space three

gilded lions; and below them on the centre of the gates have been fixed alternately a row of swans and antelopes; but only three remain: one swan on the North side, and one antelope in the middle, and one at the South end.' On a later page, when writing about King Henry's arms, he adds: 'The three fleurs de lis and the three lions are placed alternately in relief over the doors of the iron grate in front of the tomb.' It is needless to say that none of these ornaments is to be seen now, nor is there anything to show how they could have been fixed; but the lilies and leopards are plainly visible in Sandford's elevation of the west front of the chapel (pl. XVI).

The arch within which the grate is set is surmounted by a graduated row of housings for images in the form of two-sided canopied brackets, richly traceried underneath, with intermediate pinnacled buttresses carried downwards as pendants (pl. XVIII). On the front point of each bracket is carved a small image of a saint, now so decayed as to be beyond certain identification with the exception of the first, which is a beautiful little figure of St. George standing over the Dragon. The housings are five in number. That in the middle is a double one, now empty, but it not improbably contained the two seated figures representing the so-called Coronation of the Blessed Virgin. The four single housings each contain a seated figure of a lady in gown and mantle with a crown upon her head. The first and second of these ladies have the hands and what they held broken away; the third has also lost her head as well as her hands; while the last one, although retaining one hand, holds in it an object too broken to be identified. In their present condition it is a little uncertain who these crowned ladies are, but I think Mr. Lethaby's suggestion that they may be Virtues is not an unlikely one. It may be noted that between the two canopies of the double housing there is a small figure, which has been painted red, holding a book. All the canopies have open traceried supercanopies, and the whole is finished off by an elaborate cresting (pl. XVIII).

The two octagonal turrets that flank the western elevation of the chapel stand in front of the easternmost pair of the thirteenth-century pillars of the apse, round which they are so built as to leave about only one-third of their diameter exposed (pl. XVII). With the exception of the western sides, which are treated differently, the turrets are divided into two stories with ranges of imagery, and capped by a third story filled with little figures in housings. The western face of each contains the doorway into the vice, and a tall traceried window to light it, with a standing image corbelled out from the sill. The corbel is so designed as also to serve as a canopy to the doorway. Owing to the turrets being partly built upon the monuments of Queen Eleanor and Queen Philippa, the brackets over them, on which the lower images stand, are fixed at different levels. As the images seem to be arranged in couples, it will be more convenient so to describe them.

WESTMINSTER ABBEY CHURCH. NORTH-WEST AND SOUTH-WEST VIEWS OF THE CHANTRY CHAPEL OF KING HENRY V.

Published by the Society of Antiquaries of London, 1914

The innermost figures consist of two manifest pairs, one over the other. The lower two, which stand on pedestals 4 ft. 10 in. high, are figures of bishops or abbots in mass vestments, with rich mitres on their heads, and the grey amess of the quire habit worn beneath showing about the neck. Both have lost their hands, but the hole for its point in the base shows that the left hand in each case held a wooden or metal crozier, and the right therefore was probably raised in blessing. These figures, which are 5½ ft. high, are difficult to assign, and any one guess is almost as good as another.

The upper figures are, to the north, an elderly king with long beard, in parliament robes, and with a model of a church in his left hand; the right, which is gone, probably held a sceptre. The figure to the south is also that of a king, of less venerable appearance than his fellow, but vested like him, and also holding a church; the right hand is gone.

These two regal figures are clearly intended for 'founders' of the church, and I am quite content to accept Mr. Lethaby's suggestion that they represent King Sebert, the mythical first founder, and King Henry III, who may be regarded as a second founder.

The next figures are the two over the turret doors (fig. 5). That to the north is a tall image, 5½ ft. high, of an old man with bare legs and feet, clad in a hair robe down to the ankles, with an ample mantle laced across the breast. The head is bare, but behind it is slung a broad flap hat. The upraised hands are both gone, but from the right wrist hangs a pair of beads, behind which is seen a wallet. The corresponding figure to the south is a tall and old bearded king in parliament robes. The crown, which was a metal one, is lost. The right hand is broken off at the wrist, while the left grasps the edge of the mantle.

These two figures, from their prominent and dominant position, undoubtedly represent St. John in the guise of a pilgrim receiving the ring from St. Edward the Confessor.

Of the images beyond, the lower pair stood upon pedestals like the mitred figures, but the northernmost is lacking. It may have represented St. John Baptist. The image to the south is that of a curly-headed deacon in amice, albe, and dalmatic, and although the hands that might have held the Gospel book and the stones, which are shown in Sandford's engraving (pl. XVI), have gone, he clearly represents St. Stephen.

Of the upper figures, that to the north, probably in honour of the Queen-consort, is St. Katharine, in gown and mantle and with unbound hair, over which she once had a metal crown (fig. 6). Her sword and wheel are gone with her lost hands, but her identity is confirmed by the grovelling figure of Maximian, upon whom she stands. The corresponding figure to the south is probably

Fig. 5. Images of St. John as the pilgrim and of King Edward the Confessor on the chantry chapel of King Henry V.

St. Edmund the king. He is clad in parliament robes, with the mantle clasped by a rich brooch, and in his right hand he holds apparently the hilt of a broken sword or the foot of a sceptre; the left hand is gone and the crown is much broken.

Of the images that face north and south, that over Queen Eleanor is a deacon in amice, albe, fringed dalmatic, and fanon, with a closed Gospel book in his left hand; the right hand is gone. He probably represents either St. Vincent or St. Lawrence (fig. 6). The companion figure which was over Queen Philippa is lost.

The upper figures are both cardinals. The north figure (fig. 6) is clad in cassock, gown with arm-holes, a tippet with hood drawn over the head, and over it a hat with looped cords ending in a single pair of tassels. The right hand is gone, but the left holds a clasped book. The south figure is vested exactly like the other, but the strings of his hat have each three knots, beyond which they are forked and end in tassels. The left hand is upraised, and in the right is a closed book. It is very hard to say whom these figures represent, owing to the lack of saintly cardinals. We should hardly expect to see St. Jerome without his three companion doctors, who are certainly not represented, and are therefore

Fig. 6. Figures of St. Katharine, a Cardinal, and St. James, on the north turret of the chantry chapel of King Henry V.

driven to look in another direction. Now it so happens that the first names in the list of King Henry's executors in his 1415 will are Henry bishop of Winchester, 'our uncle,' and Thomas bishop of Durham. The former was Henry Beaufort, who was made cardinal[1] in 1426 7 and died in 1447, and the latter was Thomas Langley, made cardinal in 1411 and died in 1437. It has already been shown that the figures on the turrets include historical personages as well as canonized saints; there is therefore no reason why the two cardinals should not be represented. They seem, too, to have been the only survivors of the ten original executors, with the exception of Walter lord Hungerford, who could have had anything to do with the ordering of the chapel.

On the other hand, Dr. M. R. James, the Provost of King's, to whom I referred the matter, suggests, though with all diffidence, that the figures represent St. Jerome and the thirteenth-century cardinal Bonaventura, and he points out that the latter's *Life of Christ* was translated into French and dedicated to King Henry V by Jean Galopes, and that Corpus MS. 213 is actually his copy. I do not recall any other example of Cardinal Bonaventura being represented in England, but that in nowise minimizes the value of Dr. James's suggestion.

The last pairs of figures, or rather the three figures that remain, are clearly those of apostles. There is no question as to the upper pair, who are St. James the Great[2] on the north (fig. 6), and St. John the Divine[3] on the south. The lower north figure has a book in the left hand, but the right is broken away. The face is also so hidden by the tester of Queen Eleanor's tomb that it cannot be seen from below, but it is possible from the steps of the vice to *feel* it and to say that it has a curly beard. The figure may possibly therefore be St. Peter, and his missing fellow on the south St. Paul. It should, however, be noted that the face of the turret on which these apostle figures occur is much narrower than the other sides, and the images are only about 3 ft. high; the bearded figure may therefore be some less important person than the patron saint of the church, who is nevertheless not otherwise here represented. All the five sides of the two lower stages of the turrets are pierced with windows; the images outside can therefore be examined from within, and seen to be worked all round.

The uppermost stories of the turrets are fashioned like a continuous series of canopies curving out over the images below, and each containing three canopied housings. Within these are or were, for some are lost, little figures

[1] John Kemp, the archbishop of York, was made cardinal in 1439 and died in 1452, but he was neither an executor nor an overseer of King Henry's will.

[2] He is a bearded figure in gown and long upper tunic, with a broad flap hat with a scallop in front on his head. In the left hand he holds a large clasped book, but the right, which probably held his staff, is gone. Slung by a strap over the right shoulder and hanging at his left side is a wallet.

[3] He has a long palm-branch in the left hand; the right, which held probably the cup and devil, has gone.

of angels holding crowns, open books, scrolls, etc. The tops of the turrets are finished off with beautiful cresting.

The doorways in the west front of each turret are four-centred, and retain their original oak doors. The vices within are 4 ft. 10 in. in diameter, and have the steps built throughout of the hard white limestone. The landing at the top is protected by a parapet wall, in which is set a slab of firestone carved on the outer face with a fine shield of the king's arms, *France modern and England quarterly*, in a square cusped panel. The newel is continued above this, and ends in a carved capital of four angels, from which springs a lovely little fan vault[1] resting on corbels carved as angels holding crowns. The archways from the vices into the chapel are four-centred with crocketed ogee canopies over.

The chapel (see plan, fig. 7) is 21 ft. long and 13¾ ft. wide, and has its west end formed by a parapet wall 3 ft. 7½ in. high, forming a backing to the canopied images over the arch beneath, and flanked by the vice-turrets. This end has evidently been kept low to conform with King Henry's wish that the priest when saying mass should be seen from the church. Next the turrets come the marble thirteenth-century pillars, which are visible for their whole height within them, and then the rest of the chapel. The floor space is divided into three sections. The westernmost is 9 ft. 7 in. long, and paved with large and plain red tiles. On each side is a stone step 7⅜ in. high and 1 ft. broad, which abuts eastwards against a marble step crossing the chapel from side to side: this step forms the second section of the floor, and is a platform 6 ft. 3 in. deep paved with large red and black tiles, most of which are modern. Then comes another but lower marble step of the third section, which forms the altar platform, and is paved with large yellow and dark green (or black) tiles set square.

The sides of the chapel (pl. XVIII), as far as the altar platform, consist of parapet walls 3 ft. 11½ in. high, rising from a stone bench with moulded plinth and edge, 17½ in. high and 13¾ in. broad. The wall has a moulding along the base, and a moulded parapet, on which are fixed at distances 4 ft. apart three upright iron pegs, 3½ in. long and ½ in. in diameter. They are all of the same length, and have not been prickets for candles but pegs to hang bankers from. At each end of the altar platform is a tall stone cupboard, with panelled ends and richly crested top. They are 4 ft. 2 in. wide, 4 ft. 11 in. high, and 13 in. deep inside; and were closed by flap doors 5 ft. 2 in. long and 4 ft. 5 in. wide, hanging from three iron hinges at the top, the halves of which alone remain now. There are no signs of fastenings, and it is clear that the doors must have been folded across the middle, or they could not have been raised past the altar end. The insides of the cupboards are of clean smooth ashlar, and were formerly fitted

[1] This is crossed by iron bars at the springing line.

with wooden linings and shelves. On top was a row of five prickets for candles, and there are still some remains of the wax that ran down from them.

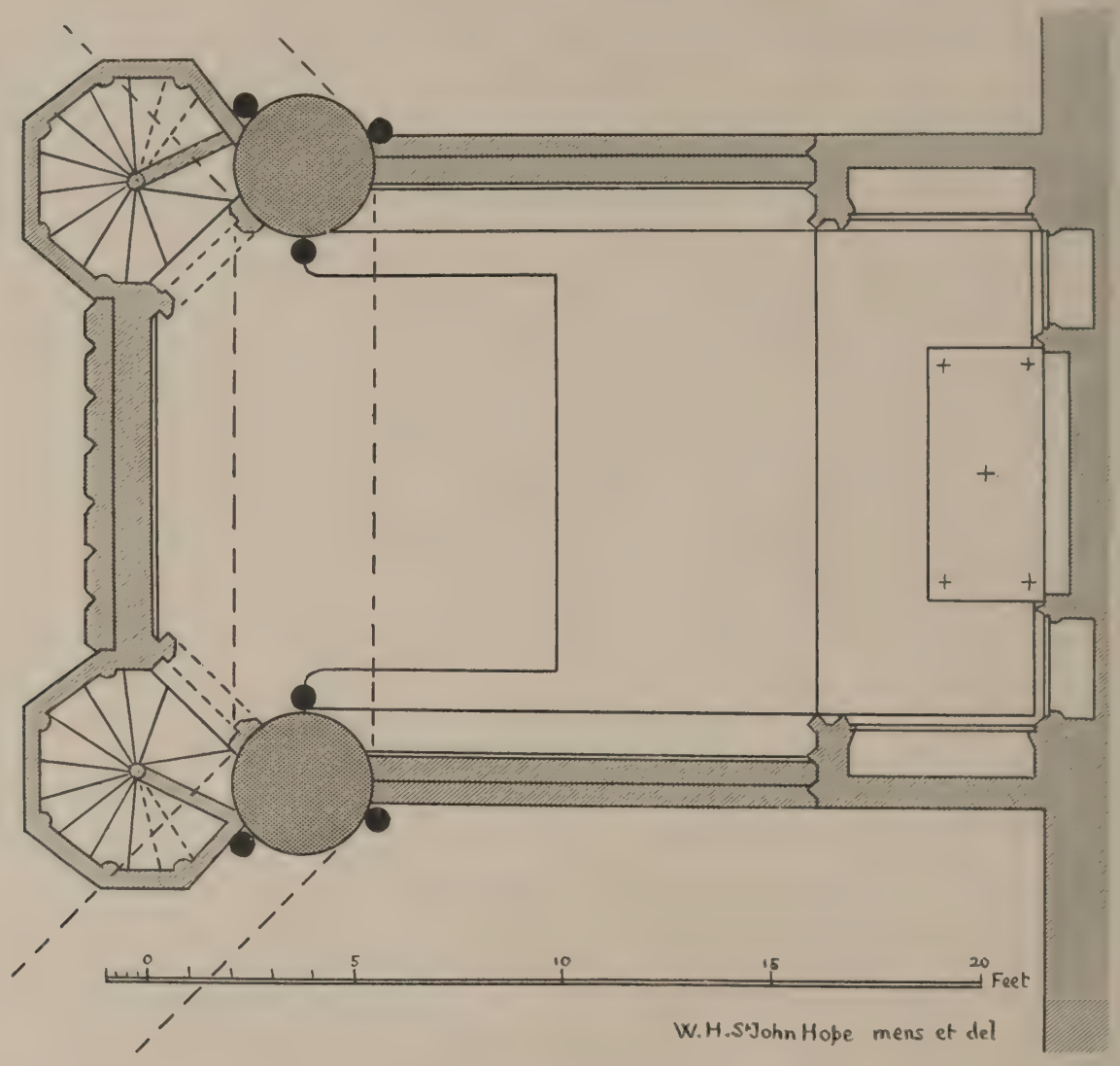


Fig. 7. Ground plan of the chantry chapel of King Hnery V.

In the east wall, at either end of the altar, are two exactly similar cupboards, but only 2 ft. $1\frac{1}{2}$ in. wide, which also had flap doors 5 ft. $5\frac{1}{2}$ in. long and 2 ft. $4\frac{1}{2}$ in. broad hanging from a pair of hinges at the top. The bottoms of the cupboards are $15\frac{3}{4}$ in. above the floor, and have a moulded plinth which appa-

rently extended, with panelling above, across the east wall. Dart, writing about 1740, says of these cupboards:

> On the inside of these Walls, *i.e.* in the Chapel, are Presses of Wainscot with Shelves and folding Doors, very neat; there are in all six, *viz.* four on each side, *i.e.* the Lining of these Side-walls; and on each side the Altar is one smaller.

Gough, some fifty years later, also states that

> On each side of the last step is a large press, with a flap door fastened by three long hinges. On each side of the altar is a similar press and flap, but of smaller dimensions, and on the cornice over the North has been painted a shield.

The wood linings and doors of the cupboard were in existence, therefore, as late as 1706. It is not easy to follow Dart's statement as to the four presses, unless it be assumed that the larger lockers were subdivided horizontally by the fold of the flap doors.

The altar is 3 ft. 4½ in. high, and of Purbeck marble, with an ancient slab of the same marble 6 ft. 0½ in. long, 2 ft. 0 in. wide, and 4 in. thick, with hollow-chamfered under edge. On the top are cut the usual five crosses paty to mark the places where it was anointed on the day of its hallowing. This slab was taken down in the sixteenth century and laid in the floor of the chapel, where the modern tiling now is. It was again set in place by Dean Stanley in 1878 as a covering, after many vicissitudes, to the remains of Queen Katharine, the consort of King Henry V[1] (pl. XVIII).

Over nearly the whole length of the altar there is yet another locker, 5 ft. 0½ in. long, 3 ft. 0 in. high, and 7 in. deep. There are iron catches at each end for the latches of the doors, but these no longer remain, and it is not easy to see how they were hinged or worked. Like the other recesses, this is backed with smooth ashlar, and was evidently lined with wood. It is curious that neither Dart nor Gough makes any mention of this locker. The recess is flanked by two pinnacles, of which the northern still has in it the iron eye for the riddel-staff. There are also remains of iron fixings just beyond the southern pinnacle, and a long pin over the middle of the altar. The panelled western ends of the large side cupboards have also an iron eye against the wall, 3 ft. up. Over each of the recesses right and left of the altar there has been painted a shield of England quartering France, flanked by a pair of peg holes for something, now blocked.

[1] On the front is inscribed 'Sub hac Tabvla (Altari olim hvjvsce Sacelli) Div prostrata, Igne confracta, Reqviescvnt tandem, Varias post vices Hic demvm jvssv Victoriæ Reginæ deposita, Ossa Catharinæ de Valois, Filiæ Caroli Sexti, Franciæ Regis, Vxoris Henrici Qvinti, Matris Henrici Sexti, Aviæ Henrici Septimi. Nata MCCCC Coronata MCCCCXXI Mortua MCCCCXXXVIII.'

It has generally been assumed that this remarkable series of cupboards was constructed to contain the collection of relics belonging to the church which was displaced by King Henry's tomb. He does indeed say in his own directions as to this chapel *in quo loco volumus dictas reliquias collocari*, but there is nothing to show that the cupboards were used, though they may have been made, for the purpose. On the contrary, there is ample evidence that the relic cupboard was moved first to the north of the shrine, and after King Henry VI had decided to be buried there, to the back of the high altar. As a matter of fact, as the inventories of it prove, the chapel of King Henry V was furnished with various ornaments of its own, which were in the custody of the shrine-keeper, and not in the vestry. And in these cupboards the ornaments in question were no doubt kept.

Both the altar and the cupboards that flank it are surmounted, at a height of 8 ft. from the floor, by a moulded cornice extending beyond them north and south across the eastern wall of the ambulatory bay (pl. XVIII). Over the altar there are wrought in the hollow of the cornice three trefoil ornaments. Of the middle one only the right-hand half remains ; it seems to have been carved with an irradiated figure in the upper lobe upholding a St. Andrew's cross, and with a sword proceeding out of his mouth. The hilt of this is towards another irradiated sitting figure below, and there was doubtless a third figure in the lost half. Round the edge is an inscription, but I can only make out the last word quem and the final r of the preceding word. The other two trefoils both have an irradiated figure of our Lady and Child on a moon in the upper lobe, and the maiden with the unicorn below (fig. 8), who is also irradiated in the southern trefoil. The trefoils alternate with four large painted shields of the king's arms, *France modern and England quarterly*, now greatly defaced. Since these painted shields (and those below over the two lockers) are the only traces of coloured decoration in the chapel, they are possibly additions.

Beyond the trefoils the cornice has carved representations of a swan and an antelope collared with crowns, to which are attached massive chains fastened around the shaft of a beacon between them. The creatures are so arranged that north of the altar the swan is on the left, and south of the altar to the right of the beacon.

Above the cornice the whole width of the wall, about 28 ft., to a height of about $12\frac{1}{2}$ ft. is covered with a splendid display of canopied housings full of imagery (pl. XVIII). The principal housings, of which there are seven, still contain six great images upon rich pedestals, and between them are tiers of four little housings, one above the other, with similar series of three housings at each end, containing as many as thirty out of an original total of thirty-four lesser images. The outer series of three are each surmounted by an angel.

WESTMINSTER ABBEY CHURCH: EAST END AND PART OF THE WEST FRONT
AND THE CHANTRY CHAPEL OF KING HENRY V.

Published by the Society of Antiquaries of London 1914

The chief and middlemost of the great images has unhappily been removed, probably on account of its subject, which almost certainly was the Holy Trinity under the usual representation of God the Father holding before Him the Crucified Son, over whom hovered the Holy Ghost in likeness of a dove. This Trinity figure suggests another possibility, that when the Trinity altar was removed from the head of King Henry's tomb for the building of the chapel it was brought up into and re-erected in the new chapel itself, and not moved

Fig. 8. Ornament in the cornice over the altar of the chantry chapel of King Henry V.

elsewhere as some have asserted, but without any proof. It was, however, the king's own desire that the altar of his chapel was to be founded in honour of the Annunciation of the Blessed Virgin Mary and of All Saints, and the Annunciation accordingly forms the subject of the pair of figures that flank the lost image of the Holy Trinity. The angel Gabriel is to the north, in amice, girdel albe, and cope, kneeling towards the figure of our Lady; his right hand is uplifted as if demanding attention, and the left one held his mace. Our Lady, in gown and mantle and "in her hair", is seated in rapt attention with her arms crossed over the breast. Owing to the shortening of these figures by their attitudes they are raised up on additional corbel-like pedestals, richly carved, to make them range with the other great images beyond, which are all standing

Those next to the Annunciation group are both kings. He to the north is a venerable and long-bearded figure, in gown, tippet, and mantle opening on the right shoulder. The left hand was upraised, but is gone, and the right is also partly broken, with whatever it held. The king to the south is bearded and habited like the other, but his mantle opens in front, and he is less venerable in appearance; he, too, has the left hand broken, but the right held an arrow or a sceptre. Though neither figure now carries anything by which he may be identified, there can be no doubt that they represent St. Edward and St. Edmund. The end image to the north is the patron saint of England, St. George, fully armed in plate armour, with a vizored helm on his head, transfixing with his spear the neck of the Dragon on which he tramples. The end image to the south is the patron saint of France, St. Denis, as a bishop vested for mass and holding his mitred head before him in his hands.

The intermediate small images, like all the firestone work of the chapel, are in a very mouldering condition, and hard to see from below; without special scaffolding it is not safe to venture upon their identification, but they possibly include the twelve apostles, the four major and the twelve minor prophets, and six others. The whole array of imagery is nevertheless of the greatest possible interest and value, and had it been in France would probably long ago have been cast and reproduced in the Trocadero Museum as a notable example of medieval sculpture.

We have next to consider the remarkable series of figures on the northern and southern faces of the chapel (pl. XIX).

It has already been pointed out that the arches spanning the ambulatory have narrow window-like openings in the walling west of them. These openings have on the eastern jamb a pedestal and housing for an image of about 3 ft. in height, with a housing above for a smaller image about 2 ft. in height. The lower figure in each place has been lost, but the upper housing on the north side contains an image of St. Barbara with an open book in her right hand, and her left resting upon a spired tower on the ground beside her. The upper housing on the south contains an image of St. Dorothy with a basket of flowers in her hand (fig. 9).

The arches over the ambulatory have the spandrels filled with large and finely sculptured shields of the king's arms, supported by three diademed angels, one above and one on either side, issuing from clouds, and clad in amices and albes. Below each shield is a fourth angel (fig. 9). Of these, the eastern angel on the north side holds the sceptre known as the orb and cross, and the western held a crown. On the south, the eastern angel holds an open music-book, and the western held a sword, of which only the hilt is left.

The cornices or friezes that surmount the arches are filled with carved

badges, arranged on either side of a boldly projecting carving of the mantled helm with the king's crest, a crowned leopard standing upon a cap of estate,

Fig. 9. Spandrel with the King's arms, etc. and figure of St. Dorothy on the south face of the chantry chapel of King Henry V.

with a small shield of his arms hanging below. On the north side a similar atchievement of the king's arms, etc. over the arch to the Lady-chapel is flanked by a beacon with an antelope chained to it, and by a swan with a chain hanging from the crown about his neck. Over the main arch the devices to the left of

the king's arms are an antelope and a swan chained to a beacon between them, and a chained swan above. Beyond are (1) a swan chained to a beacon, (2) an antelope and a swan chained to a beacon, and (3) the same device with another chain from the swan to a second beacon at the end. On the south side the devices differ. The arms, etc. over the arch to the Lady-chapel are flanked by a swan, and a swan and an antelope with chains from the crowns about their necks. Over the main arch the king's helm, etc. are flanked by two chained swans, beyond which are, to the east, an antelope and a swan chained to an oak (?) tree, and to the west two repetitions of the same device.

Above this cornice the sides of the chapel are covered with canopied figures, which are returned on the east across the space between the tops of the arches into the Lady-chapel and the series of great images of saints above (pl. XXII). The housings of the figures all have rich supercanopies with flat crested tops, upon which, west of the cupboards in the chapel, are perched swans and antelopes alternately, but on the south side the swans are floating in water. Upon the backs of the cupboards, and along the east wall the canopies support an upper tier of images, in similar housings (pl. XIX).

Over the middle of the main arches the row of images is interrupted by a triple-canopied niche, 3 ft. wide, containing a coronation group. West of this are nine single figures, and to the east five more. Next to these is a single figure on the east wall, and then another wide niche with the king on horseback, and beyond that two more figures. The upper tiers have six images on the chapel, then two more on the east wall, followed by a wider niche with a seated figure of a lady, beyond which are three more single figures. There are thus six groups, and housings for fifty-six images, of which only three are missing. The images are not fixed, but stand of their weight in their housings, and it is clear, from a comparison of the existing arrangement with the drawings made by John Carter in 1786, that the original order has been disturbed.

The interpretation of this fine series of sculptures is beset with difficulties.

The groups of the main range represent the king enthroned and the king riding, and correspond after a fashion with the figures on the great seals, which perhaps suggested them. But the meaning here is not quite the same. Further, on comparing the two sides of the chapel, the important fact becomes evident that on the north all the figures, save those that are mitred or wearing coifs, are bareheaded, while on the south all the figures are covered. There is also no question, as has long been claimed and admitted, that the groups over the main arches represent incidents in the coronation of a king, and we may be assured that the king here is Henry of Monmouth.

Now during the coronation of the king of England there are two supreme moments: the one, when the crown is placed upon his head and the whole vast

(North)

(South)

WESTMINSTER ABBEY CHURCH: IMAGERY ON THE OUTER SIDES OF THE CHANTRY CHAPEL OF KING HENRY V.

Published by the Society of Antiquaries of London. 1914

(North

(South)

WESTMINSTER ABBEY CHURCH: THE CORONATION GROUPS ON THE CHANTRY CHAPEL OF KING HENRY V.

Published by the Society of Antiquaries of London, 1914

assemblage shouts 'God save the King'; the other, when the newly crowned sovereign is led up to and set in the royal throne, surrounded by all the great officers of state and the nobles who bear the regalia, while *Te Deum* is sung. This splendid ceremony has always been followed by the peers of the realm presenting themselves to do their homage. These two great incidents of the coronation, the acclamation and the homage, are, I venture to submit, what are represented on King Henry V's chapel.

First let us examine the sculptures on the south side (pl. XX). The principal subject here is the king seated, in his parliament robes, with the orb (or sceptre with the cross) in his right hand, and a broken fragment in his left hand of the rod with the dove. Upon his head is the crown, of crosses alternating with fleurs-de-lis, and arched over at the top. On the right of the king stands the archbishop of Canterbury, Thomas of Arundel, with one hand still holding the crown. On the left is the abbot of Westminster, William of Colchester, who is represented for symmetry's sake as steadying the crown with his right hand. Both prelates are vested for mass, with their mitres on their heads, but instead of chasubles they have copes with large round brooches.[1]

The standing figures of nobles to the right and left of the coronation group are about 21 in. high, and represent them, for the most part, in long girded gowns, with ample mantles, and large hoods upon their heads with dagged liripipes. Four have short tunics to the knee and tight hose, and hold open books, or in one case a book in a bag or chemise, but the majority do not carry anything, and either grasp parts of their dress, or play with the long ends of their hoods (pl. XIX).

The wearing of these hoods raises another curious point. At the moment of the crowning of the king a dramatic and thrilling touch is now given to the ceremony by all the peers simultaneously putting on their coronets. This striking custom, which I was privileged to witness at King George V's coronation from

[1] Although this sculpture clearly represents the crowning of the king, it will be seen that his robes are not those in which he ought to have been figured, namely, the *colobium sindonis* or dalmatic, and the *pallium regale* or cope, but the long gown, the hooded tippet, and the mantle which are put on him instead at the end of the service. This blunder, for it certainly is one, apparently originated at Westminster itself, for in the great mass book which was given to the church by abbot Nicholas of Litlington in 1380, the first rubric of the coronation office, *Hic est ordo secundum quod Rex debet coronari et inungi*, is accompanied by an illumination representing the king being crowned while wearing the parliament robes. Since so few of the king's subjects could or can possibly witness the actual crowning, whereas the sovereign could be seen of many on his coming away from the church in his parliament robes, it is easy to imagine how the mistake arose. It may be noted that the monumental effigies of both King Richard II and King Henry IV represent them in the parliament robes; and that in the coronation picture of King Henry VI in the well-known 'Pageant of the Birth, Life, and Death of Richard Beauchamp earl of Warwick' [Brit. Mus. Cott. MS., Julius E iv, f. 23 *b*], the young sovereign is similarly habited.

my station as a gold-staff officer among the peers themselves, goes back for a long time, and is evidently traditional, since there seems to be no earlier record of it than Fuller's account of the coronation of King Charles I.[1] Hall, however, describes the corresponding donning of their coronets by the peeresses and of their crowns by the kings of arms at the crowning of Queen Anne Boleyn in 1533, and it may, I think, be assumed that the peers similarly put on their coronets, at any rate when King Henry VIII was crowned.

Now, in 1413, when Henry of Monmouth was hallowed king, but few nobles of the realm had distinctive crowns or coronets. A duke at his investiture received a sword and a cap of honour and dignity, which if he were of the blood royal seems also to have been enriched with a golden circlet; marquesses were invested with a sword and a golden circlet; and earls with a sword only. The large class of barons was not invested at all. It is evident, however, from references to them in wills that in the fourteenth century some of the earls possessed crowns or coronets, and there are a few early monumental effigies after 1415 of both dukes and earls which have on their heads crowns of various patterns.

We must look, therefore, for another origin of the present custom. It can be found, I think, in these very Westminster sculptures, by assuming that when Henry V was crowned, all the nobles present followed an ancient custom of simultaneously putting on their hoods, and here we get an adequate explanation of the ranges of figures on the south side of the chapel.

The coronation scene on the north side differs somewhat from the other (pl. XX). The king is shown as before, seated in his parliament robes, with the remains of the rod in his left hand, while the right, which is broken off, no doubt held the sceptre or orb with the cross. The two prelates stand on either side, but their hands are now used to save the crown from pressing too heavily upon the king's head and to support his arms while holding the sceptres. On either side, too, kneels a peer in his robes, with another peer standing behind him. The group therefore depicts in a conventional way the rubric in *Liber Regalis*, that after the crowning

> The King being thus set in his throne, the peers of the realm standing around the King and stretching forth their hands as a sign of fealty, shall offer themselves to support the said King and Crown. . . . But first all the nobles of the realm then present shall publicly upon the said stage do their homage to the said King.[2]

[1] L. G. W. Legg, *English Coronation Records* (Westminster, 1901), xlvii.

[2] Rege itaque in solio suo taliter collocato pares regni dictum regem undique circumstantes manibus palam extensis in signum fidelitatis offerent se ad dicti regis et dicte corone sustentacionem . . . facto prius dicto regi ab omnibus proceribus regni tunc presentibus publice super dictum pulpitum homagio.

(North)

(South)

WESTMINSTER ABBEY CHURCH: THE RIDING GROUPS ON THE CHANTRY CHAPEL OF KING HENRY V.

Published by the Society of Antiquaries of London, 1914

Before leaving the group it should be noted that the archbishop wears a rich cope with a lattice diaper of roses, and the abbot a like cope with a diaper of fleurs-de-lis, in both cases with orphreys of roses; both, too, have gorgeous mitres. The standing images right and left of the coronation group are, as already noted, for the most part bareheaded. Eight of the nine figures to the west now are judges in belted gowns, fur-bordered tippets with hoods, and mantles, with coifs on their heads. He next to the king's group has a purse in his left hand, another holds a scroll, and a third a closed book. The end man has an open book in his hand and a hood upon his head, and is probably one of the covered figures missing from the south side. To the east of the group come, first a mitred figure in cassock, gown, and hooded tippet, and gloves on his hands. Next stand a judge (as before), a monk in his habit, a noble with his hood slung over his shoulder, and another noble. The mounted figure of the king to the east has also on the right a noble with his hood thrown over the right shoulder, and to the left two judges, the further of whom holds a book. All these personages, it will be seen, may well have formed part of the assembly in the church and be representative of others.

The riding groups next call for attention (pl. XXI). That to the south is surmounted by a rich triple canopy and represents the king galloping at full speed over a stream. His horse is covered with a rich trapper of the royal arms, and has a chamfron pierced with many small holes at the nostrils, eyes, and ears. The king is in armour with a sleeved coat of his arms, and a helmet on his head encircled by a crown. On his left arm is a convex shield also of his arms, and in his left hand he holds the horse's bridle, which is covered with a strip of rich stuff embroidered with alternating leopards and fleurs-de-lis. The right hand was extended behind and held the sword, but has been broken away. Behind the king is a hill with the stream flowing down it, surmounted by a number of apparently ruined buildings.

The corresponding panel on the north side represents the king on horseback as before, but galloping at full speed across the country. The right hand and the sword are again broken off. Behind the king are two rocky elevations. That in front of him is crested by a castle strongly reminiscent of the famous Château Gaillard, with dead bodies hanging from the outer battlements. The other hill has a battled wall on top with bushes (?) growing at the base. On the ground behind the king is another castellated building.

The upper tiers of figures are a little perplexing. On the south side the six in one row are attired in the same fashion as the nobles below them, and have their heads covered in the same way. They probably, therefore, belong to the coronation group.

The returned series on the east wall consist of two canopied figures of

judges in their coifs, of whom one has lost his hands and the other holds a book. Then comes a wide niche with a seated and uncrowned figure of a lady in girded gown and mantle and long hair, holding away from her in her right hand an open book, while her left hand rests in her lap. Beyond are two more judges in coifs, both with closed books, and a bearded noble with his hood on his head and an open book in his hands. The canopies of these figures are surmounted by tall spires (pl. XXII).

The upper tier of six figures on the north side of the chapel consists of (1) a man in turban and long forked beard, (2) a young noble with a book, (3) a noble holding his mantle with the right hand, and his belt with the left, (4) a young noble with a deed in his hands, (5) a man in long gown and tippet, perhaps a doctor, and (6) a noble with his hood upon his head. All these figures have the heads partly turned to the right as if facing the chief image there, and do not seem to have any relation to the long row of uncovered persons below.

The returned images on the east wall (pl. XXII) consist of a man with covered head, holding an open book, and turned towards his neighbour, who is a man with a short beard, opening or shutting a book which he has in his hands. Then comes the wider niche with a seated figure as before of a lady, turned slightly to her left, and pointing with her right hand to an open book which she holds in the other. Beyond are a bearded ma in a coif (?) holding a half-open book in his hand, a young man with hood on head reading from a book, and lastly a bearded old man with a cap on his head, a hood about his neck, and a mantle opening on the right shoulder. The meaning of these groups is not at all obvious. The seated ladies closely resemble in size and attitude the Virtues on the west front of the chapel, but are not crowned. They, moreover, hold books, and are accompanied by grave and elderly men with books. They must, therefore, be symbolical figures, but it is uncertain whom they represent.

In describing the coronation group on the north side reference was made to the robes worn by the four peers who form part of it. These are among the earliest representations of the distinctive robes that are still worn, with little variation, by the peers, and consist of a mantle, worn over a gown and hooded tippet, and opening on the right shoulder. From the edge of this opening and extending round to the middle of the back are a number of transverse bars of ermine and gold, varying according to the degree of the wearer; thus a duke had four, a marquess three, and an earl two only. These robes are admirably shown in the group of peers forming part of the ornament of the illuminated foundation charter of King's College, Cambridge, dated 1440, and in the latten figures of weepers about the tomb of Richard Beauchamp earl of Warwick, contracted for by William Austen in 1452, but in this case by mistake the mantles open on the left instead of the right side.

WESTMINSTER ABBEY CHURCH: IMAGERY ON THE UPPER PART OF THE CHANTRY CHAPEL OF KING HENRY V.

Published by the Society of Antiquaries of London, 1914

From the description of this unique chantry chapel of King Henry V we may pass to inquire who was the master-mason responsible for its design. The answer is fortunately not far to seek.

In one of the appendixes to his *Memorials of Westminster* Dean Stanley has printed, from the original manuscript in the Abbey archives, the depositions of witnesses as to the choice by King Henry VI of the place of his burial in the abbey church. One of these witnesses, Thomas Humfray, sometime barber and servant to Abbot Edmund Kirton, and afterwards serjeant of the monastery, deposed that, being present at St. Edward's shrine on a certain afternoon, the king came thither with several lords and others, 'all which persons went up into the Chapelle of Kyng Henry the v^th^ there abydyng and commonyng by the space of an howre and more. And at their commyng downe of the same Chaple mett with the seyde Kyng th' Abbot aforesaid, Dane John Flete, Dane John Ramsey, then kepar of the said Shryne, monkes of the monastery aforesaid, this deponent and other moo. And ther was communicacion had by the Kyng and lordys aforesaide . . s this deponent seith and devyse taken for a convenient place for the sepulture of the seid Kyng Henry the vi^th^. And in conclusyon it was devysed that the Reliques of the seide churche that tyme standyng on the north syde of the forsaid Shrine, adjoynyng to the tombe of King Henry the iij^de^ shuld be removed, and in that place where the seide Reliques stoode the sepulture of Kyng Henry the vj^th^ aforsaide shulde be ordeyned. . . . For whiche cause the same Kyng Henry commawnded a mason to be callyd to thentent to marke out that grounde. Whereupon by th' advyse of th' Abbot aforesaide oone callyd Thurske, that tyme beyng master-mason in the makyng of the Chapelle of King Henry the v^th^ which mason incontinently come. And than and there he by the commaundement of the saide Kyng Henry the vj^th^ and in his presence with an instrument of iron whiche he browght with hym, markyd out the lengthe and brede of the saide sepulture there to be made in the place aforesaid.' Another deponent, Philip Ilstowe, the lavender of the monastery, also mentions the calling of a mason called Thurske, who by the king's command 'markyd out there the foresaid place with an iron pykkes'.

The Rev. R. B. Rackham, whose early death many of us deplore, has shown that John of Thirsk, whose real name seems to have been Crowche, was appointed in 1420-1 master-mason of the rebuilding of the nave of the abbey church, in the room of William of Colchester, and that he continued to hold office till the summer of 1451. I find that he was also appointed for life master-mason of Windsor Castle, by letters patent of 28th June, 1449, in which he is

[1] Third and revised edition (London, 1869), 602, 607.

called master-mason of the monastery of Westminster. He did not hold his new post long, since a successor in the place of John Thirsk, deceased, was appointed master-mason of Windsor on 12th November, 1452.

From the various recollections of the witnesses, Dean Stanley assigns to them dates extending from 1457 to 1461, but if John of Thirsk was called from his work to mark the floor it must have been not later than the close of 1450. The chantry chapel of King Henry V was then sufficiently advanced for the king and his attendants to go up into, and it may be that their long stay in it was caused by conversations with John Thirsk as to its completion, which ought to have been near after ten years since its beginning.

There is one more point. Another of the witnesses of King Henry VI's visit to the Abbey was Thomas Fifelde, of London, 'marbeler,' who deposed[1] that John Essex, 'otherwyse callyd herd marbelar,' with whom he was then apprenticed, was sent for by the king to Westminster 'to thentent to make a tombe for hym', and he relates a conversation with his said master John Essex and one Thomas Stephyns a coppersmith then dwelling in Gutter Lane, when 'sittyng at soper in the howse of the said John Essex', about a bargain they had made with the king as to his tomb. Now John Essex marbler of London, William Austen founder of London, and Thomas Stevyns coppersmith of London, entered into a contract in 1454 for certain works in connexion with the tomb of Richard Beauchamp at Warwick. It is therefore conceivable that John Essex may have had something to do with the marble work of King Henry V's chapel.

There must yet be said a few words about the things that were and are kept in the chapel.

In King Henry's will is the following direction:

> Item Legamus Ecclesie beati Petri Westmonasterii et Altari Annunciationis beate Virginis supra Tumbam nostram tria paria Vestimentorum cum ornamentis pro altari ejusdem sortis;
>
> Item unum calicem cum patena, unum par urseolorum, unum pacem, cum campana de auro puro;
>
> unum par Candelabrorum deauratum boni ponderis;
>
> que omnia volumus eidem altari;
>
> unam crucem argenti deauratam pro medio ejusdem et unam ymaginem beate Virginis ex una parte ejusdem crucis, et angelum annunciantem ex alia, quas Crucem et Imagines esse volumus de valore CCC marcarum, et in fronte ejusdem altaris firmiter fixas, pro perpetuo remanere.
>
> Item Legamus eidem Altari calicem cum patena, urseolos, pacem, et campanam deauratam et unum par candelabrorum argenti eidem altari imprimis diebus ferialibus servitura.

[1] *Op. cit.*, third and revised edition (London, 1869), 606.

In the inventory of the ornaments and relics taken over from his predecessor by Dan Richard Tedyngton, Keeper of St. Edward's shrine, on 21st December, 1467, occurs:

For þ^e^ aucter of Kyng Harry þ^e^ v^th^ þet is
fyrst ij Candelstyckes of silver and gylt weying xx unces
a chalys of sylver weying xxv unces
A paire of cruettes of tynne,
a basyn of tynne
iiij auterclothys:
fyrst auctercloth of whyte fustian embrodered w^t^ garterres
þ^e^ secunde of rede w^t^ braunchys of grene and libardys of golde w^t^ a chesubyll
the iij auterclothe of rede w^t^ frontell of the same afore þ^e^ tabylle w^t^ lyons of gold and white hyndes w^t^ chesubylle aube and amyte of the same
the iiij is a blewe auterclothe w^t^ a frountelle afore þe tabylle of þe same work as þe rede is w^t^ chesubylle aube and amytte of þ^e^ same
iij tuellys pleyne
ij costers
j tapet
ij bankers wrought w^t^ antyloppys and Swannys and þ^e^ armys of þ^e^ Kyng in þ^e^ myddys
A paxbrede of Ivery

Dan Richard Tedyngton's successor, John Watirden, in 1479 acknowledges to have taken over the same ornaments, but adds:

Also an ymage of Seynt John þ^e^ Evaungelist with a Tabernacle of Silver and gilt on the awter Table of Kyng Herry the V^th^ the which was stolen of long tyme paste.

The shrine-keepers' inventories seem to show that the king's wishes as to the chalice, etc. of pure gold were not carried out, and that the metal ornaments were only what had been provided for ferial days. On the other hand, the fact that only two of the altarcloths had frontals suggests that the silver-gilt cross and the figures of the blessed Virgin and the angel of the Annunciation had been duly fixed in place on the front of the altar, and were not always hidden from view. The two bankers with swans and antelopes and the king's arms were probably hung from the iron pegs in the side walls already referred to.

Two other points may be mentioned: (1) the inventory of the shrine-keeper dated 10th November 12 Henry VIII (1520) mentions

iiij grete shrynes standyng in the chaple of Kynge Henrey the V^th^

perhaps temporarily only, because there was not room enough for them downstairs with the other relics.

(2) The great Suppression Inventory has:

In the Chappell of Kynge Henry the V^th^

A chalice of sylver parcell gilte with the picture of Seynt Edward garnysshed in the fote.

An alter cloth complete of grene and redde satten of Brydges.

A Vestment of white damaske with orphares of redd velvett.

A Vestment of grene damaske with orphares of redd damaske.

A frounte and alter cloth of white damaske.

(Sold) An alter cloth of old blewe and grene bawdekyne and a vestment of the same. v lynen altar clothes and ij hande towells iij corperasse casys v white tapetts and one red tapett a lytell table of lether.

There are now not any ornaments of any kind in the chapel, but on the wooden beam at the west end which spans the thirteenth-century arch there have been fixed for a long time a helm, a shield, and a saddle.

In the earliest account of the chapel, that published by Keepe[1] in 1682, he refers to the 'stairs to ascend into the same, where the Saddle which this heroick Prince used in the Wars in ffrance, with his Shield and other warlike furniture is to be seen'.

Sandford in his drawing of the front of the chapel, published in 1707, shows upon the beam a square shield or target with the king's arms, surmounted by the leopard crest above the cap of estate, but no helm nor saddle (pl. XVI).

Dart reproduces Sandford's drawing, but describes the contents of the chapel quite differently in these terms:

There are in this Chapel the Trophies of this Warlike Prince, *viz.* his Helmet, plac'd on the Wall overlooking St. *Edward's* Shrine; his Shield, which is small, the Handfast broken away, and the Colours of it not to be distinguish'd; his Saddle of blue Velvet, pouder'd with Flowers-de-liz of Gold, the Velvet dusty, but substantial, and the Colour tolerably fresh; three large Rests for Spears, a large Caparison-Cloth tolerably fresh, being quarterly of four, *viz.* the first is a Field engral'd, the Colour not visible, a Fez Chequée *Sable* and *Azure*; the second, three Flowers-de-liz *Or* in a field *Azure*; the third as the second, the fourth as the first. Over the Cross is a Cloth, the Colour lost, but on it are painted in Gold several large Harness Buckles; the whole Cloth is surrounded with a Fringe of brown and Gold silk.

This account describes several things not now existent, namely, the three large rests for spears and the caparison-cloth. This was apparently a herse-cloth with the arms of Stewart of Davington, *gold a fess checky silver and azure and an engrailed border gules*, quartering D'Aubigny, *azure three gold fleurs-de-lis and a border gules with ten round buckles of gold in the border.* This cloth was prob-

[1] *Monumenta Westmonasteriensia*, etc., by H. K[eepe]. (London, 1682.)

ably used to cover the coffin of Ludovic Stewart, second duke of Lennox, who was buried in the abbey church in February, 1623-4. It has now disappeared.

The shield, helm, and saddle are happily preserved, and by the kindness of the Dean of Westminster, Bishop Ryle, are exhibited (figs. 10, 11, and 12).

Fig. 10. Inner face of the shield in the chantry chapel of King Henry V. (About ⅛)

There is no occasion now for a minute description of them, but the saddle, if it be not that used by the earl who rode before the standard in the procession, is probably one of the four bastard saddles beaten by Thomas Daunt that became the perquisite of the Abbey at King Henry's funeral. The helm and the

Fig. 11. Saddle in the chantry chapel of King Henry V. (About $\frac{1}{3}$)

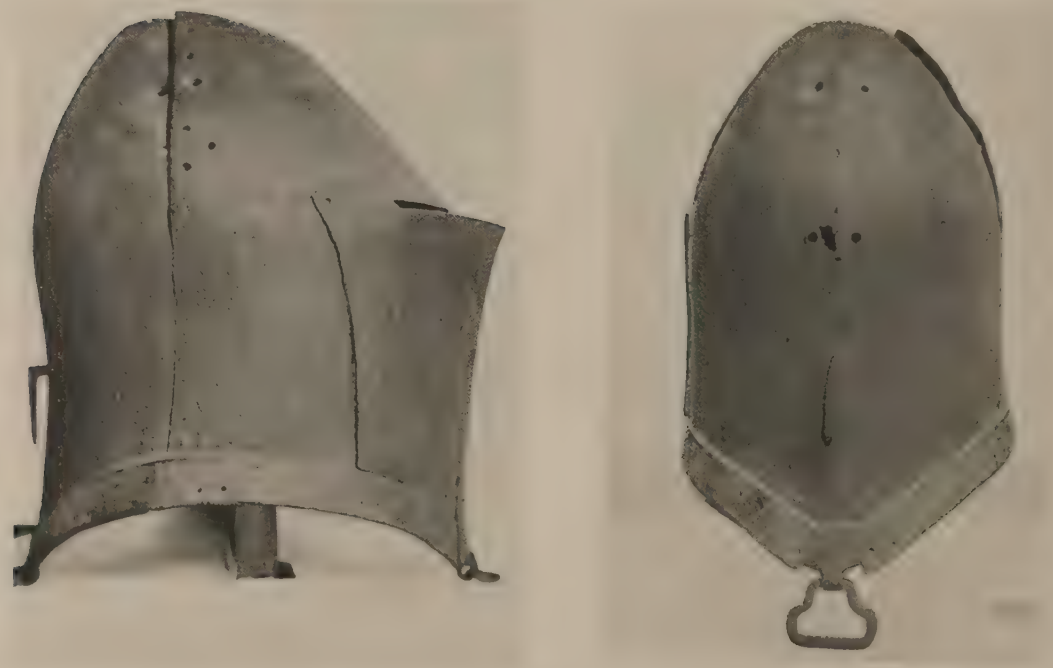


Fig. 12. Side and back views of a tilting helm in the chantry chapel of King Henry V. ($\frac{1}{4}$)

shield, too, may be regarded as part of the arming for a man (*tota armatura pro j homine*) which the sacrist received at the same time. A very old Westminster tradition had long regarded the helm as that worn by King Henry on the field of Agincourt, but this has been set aside of late years through the entry in the Issue Roll as printed by Rymer ascribing to Thomas Daunt 'the making of a crest and helm for the King'. I find, however, on turning up the original account that the word printed by Rymer as *factura* is plainly *pictura*, the painting and not the making of a helm, and as there is no other helm mentioned in the bill this was really an old one after all, and if an old one why not King Henry's? Since, however, it is a tilting helm, it can hardly have been worn by the king on the field of battle.

Here I must end both my speculations and my paper.

I must express my thanks: first to Bishop Ryle, dean of Westminster, for affording me every facility for examining King Henry the Fifth's chapel at close quarters; and secondly to Dr. Robinson, now dean of Wells, and his sometime colleague, the late Rev. R. B. Rackham, for much valuable information about the sacrist's rolls. I am also indebted to Mr. W. R. Lethaby for his sympathetic help in a variety of ways, and to Mr. David Weller, the dean's verger, for the infinite pains and trouble he has taken over the photographs which form the basis of the illustrations to this paper.

One word more. Reference has already been made to the abundant traces that exist all over King Henry's chapel, as well as on his tomb, of the limewash or distemper wherewith the whole of the imagery and stonework (except apparently the hard white limestone) was originally covered. Where this coating remains, there the old surfaces are intact; where it has gone, the surfaces invariably have perished. Surely the moral of this is, that if this noble memorial of one of the most famous of our kings is to be preserved to posterity, the bold and sensible policy should be followed, and that without delay, of protecting it once more with a coating of tinted lime-distemper. Mr. Lethaby, following the example set by Mr. Micklethwaite, has had ample opportunities of testing the efficacy of so simple and harmless a preservative, and it would be a great thing if so bold a policy were advocated by the Society of Antiquaries of London.

APPENDIX A.

Et tost apres furent enterrées ses entrailles en l'Eglise et monastere de S. Mor des fossez : et son corps bien embasmé fut mis en un sarcus de plomb . . . . . Et le Roy dessusdict accompagné de ses Princes Anglois, et de ceux de son hostel avec grand multitude d'autres gens, fut mené en grand triumphe à Paris, et mis dedans l'Eglise nostre Dame, où il fut faict un service solemnel : et de là fut mené grandement accompagné en la cité de Roüen, Et y demoura assez longue espace de temps . . . . . : et apres que les seigneurs du sang Royal l'eurent mis sur un chariot, que menoient quatre grans chevaulx, et avoient fait sa resemblance et represen ation de cuyr bouilly painct moult gentillement, portant en son chief couronne d'or moult precieuse, et tenoit en sa main dextre le sceptre ou verge Royalle, et en sa main senestre avoit une pomme d'or, et gisoit en un lict sur le chariot dessusdit le visage vers le ciel. Duquel lict le couvertoir estoit de drap de soye vermeil batu à or : et avec ce portoit on en hault à passer parmy les bonnes villes par dessus le chariot un moult riche drap de soye, en le maniere qu'on l'a accoustumé de porter sur le corps Iesus Christ au jour du sainct Sacrement : et ainsi allant moult grandement accompagné de ses Princes, et de sa chevallerie de son hostel, fut mené le droit chemin de Rouen à Abbeville, et mis en l'Eglise sainct Offran . . . . et tousiours sur le dict chemin y avoit autour dudit chariot plusieurs hommes vestus de blanc, qui portoient en leurs mains torches allumées : et derriere estoient vestus de noir ceux de la famille de l'hostel dudit Roy : et apres suyvoient ceux de la lignée vestus de vestemens de pleurs et de plaincts. Et ensuivant tout ce, alloit la Royne en grand compagnie environ d'une lieuë loing apres son dit seigneur : lequel, comme dit est, fut mené à Calais : et de là nagerent par mer a Douvres en Angleterre : et puis par Cantorbie et Rocestre allerent à Londres, où ils arriverent là nuict de sainct Martin d'hyver. A l'encontre duquel roy issirent de ladicte ville de Londres quinze Evesques vestus de chasubles pontificaulx, et plusieurs Abbez mittrez et autres hommes d'Eglise en grand nombre avec grand multitude de bourgeois, et autres communes : lesquels gens d'Eglise tous ensemble meirent le dit Roy deffunct dedans ladite ville en chantant l'office des morts : et le menerent par le pont de Londres, et par la ruë des Lombars jusques à l'Eglise cathedralle de S. Pol : et au plus pres du chariot estoient plorans et lamentans les Princes de son lignage : et avec ce le premier cheval des quatre qui menoient ledit chariot, auquel le Roy estoit, avoit un collier qui estoit painct des anciennes armes d'Angleterre. Ou collier du second cheval estoient painctes des armes de France et d'Angleterre escartellées : lesquelles luy mesmes portoit en son vivant : ou collier du tiers cheval estoient painctes plainement sans difference nulle les armes de France. Et ou collier du quart cheval estoient painctes les armes, que portoit (quand il vivoit en ce monde) le noble Roy Artus, que nul ne pouvoit vaincre : lesquelles armes estoient un escu d'Azur à trois couronnes d'or. Et apres que le service dudit Roy eut esté fait royallement, ils le porterent enterrer en l'Eglise de Vastremontier empres ses predecesseurs Roys d'Angleterre. Auquel enterrement fut fait en toutes choses generallement plus grand estat et bombant que depuis deux cens ans par avant n'avoit esté fait de nuls des autres Roys d'Angleterre.

Chroniques d'Enguerran de Monstrelet (Paris, 1596), i, 325, 326.

APPENDIX B.

Cujus Regis mortui apparatus si scire libeat, talis erat. Superposita namque fuerat cistae, in qua corpus ejus habebatur, quaedam imago staturae et facici Regis mortui simillima, chlamyde purpurea satis longa et larga, cum furrura de ermyn induta, sceptrum in una manu, et pila rotunda aurea, cum cruce infixa, in altera; corona aurea in capite, super capellum regium, et sandaliis regiis in pedibus, impositis. Et taliter elevatur in curru, ut a singulis videri potuisset, ut per hoc moeror et dolor accresceret, et ejus amici et subditi pro ejus anima Dominum tenerius exorarent. Fertur etiam mille torticios magnos per venerabiles personas circa ejus corpus delatos, et pannos aureos et sericos pro eodem oblatos. Adducti etiam fuerant ad majus altare Westmonasterii tres dextrarii, cum eorum cessoribus, ut moris est, armis Regis Angliae et Franciae (*blank*) optime armatis, et sessores inibi inde expoliati. Arma vero integre ablata, vexilla insuper, circa corpus defuncti ferebantur, arma Sancti Georgii, Angliae, et Franciae, ac imaginum Sanctae Trinitatis, Sanctae Mariae, continentur.

Sicque corpus dicti Regis usque ad Monasterium deducitur et, ministerio praelatorum et procerum regni, inter Reges Angliae ibidem, inter feretrum Sancti Edwardi et Capellam Sanctae Virginis, loco quo reliquiae ibidem fuerant reconditae, honorifice fuerat tumulatum.

Thomae Walsingham Historia Anglicana (Rolls Series, 28, i), ii, 345, 346.

APPENDIX C.

Particule provise in Garderoba Regis Henrici quinti per Robertum Rolleston Custodem ejusdem Garderobe pro interciamento Regis Henrici supradicti.

Imprimis de Willelmo Cantelowe xx pecie de bokeram nigro curti precium pecie iij*s.* iiij*d.*	lxvj*s.* viij*d.*
Item de Hugone Dyke ix pecie de bokeram longo precium pecie vj*s.*	Liij*s.*
Item de Willelmo Caudewell iv selle bastarde cum hernesio precium pecie xxvj*s.* viij*d.*	Cvj*s.* viij*d.*
Item eidem Willelmo pro opere vj tractuum coopertorum cum tartarin blodio pro j chaare pro corpore Regis	xx*s.*
Item eidem Willelmo pro M[l] M[l] braket naill precium M[l] viij*d.*	xvj*d.*
Item Thome Daunt pro vapulacione de CCxx ulnis de valencijs pro herceys Regis videlicet pro ulna xij*d.*	xj*li.*
Item eidem Thome pro vapulacione xxvij scuchons de armis Regis videlicet pro pecia x*d.*	xxij*s.* vj*d.*
Item eidem Thome pro vapulacione vij scutchons de armis sancti Georgij videlicet pro pecia iij*d.*	xxj*d.*
Item eidem Thome pro vapulacione ij trappours videlicet de armis sancti Edwardi et alterius de [armis] sancti Edmundi pro pecia xl*s.*	iiij*li.*
Item eidem Thome pro vapulacione unius tunice de armis Regis	xx*s.*
Item eidem Thome pro vapulacione viij vexillorum de armis Regis videlicet pro pecia x*s.*	iiij*li.*
Item eidem Thome pro vapulacione xvj vexillorum de armis sancti Edmundi et sancti Edwardi precium pecie viij*s.*	vj*li.* viij*s.*
Item eidem Thome pro vapulacione unius scuti de armis Regis	xx*s.*
Item eidem Thome pro pictura unius creste et unius helme pro Rege	xxxiij*s.* iiij*d.*
Item eidem Thome pro factura vj Crestes de armis sancti Georgij pro vj equis precium pecie xx*d.*	x*s.*
Item eidem Thome pro vapulacione dictarum sellarum.	iiij*s.*

Item dicto Willelmo Cantelowe pro v peciis tartarin blodij precium pecie xxvj*s.* viij*d.* vj*li.* xiij*s.* iiij*d.*

Summa—L*li.* xix*d.*

Don. etc. a Westm̄ le xj jour de Mars l'an primer

Endorsed:

vj^to^ die Marcij anno primo apud Westmonasterium concessum fuit quod fiat warrantum sub privato sigillo [executoribus testamenti Regis defuncti patris Regis nunc *written over*] ut in forma pro solucione L*li.* et xix*d.* expositarum pro custode Garderobe Regis circa provisionem parcellarum infrascriptarum. Presentibus dominis ducibus Gloucestrie et Exonie. Wyntoniense Episcopo. Comite Warr̄ Tiptoft Hungerford cancellario thesaurario et custode privati sigilli

ad procuracionem domini Ducis Exonie

Exchequer T. R. Council and Privy Seal, File 39. (See also Rymer, *Fœdera*, x, 256, 257.)

APPENDIX D.

Panni aurei

Et recepta de ij^c^xxij pannis aureis oblatis in die veneris tam in festo sancti Leonardi Abbatis ad Placebo et Dirige quam ad missam in crastino in die sepulture domini Henrici quinti nuper Regis Anglie

	Unde Ad dirige	Ad missam
Dominus Rex licet absens obtulit	xiij	xxiiij
Domina Katerina licet absens	ix	xvj
Domina Johanna nuper Regina	xj	xiij
Domina de Holond	v	ix
Dux Gloucestrie	vij	ix
Dux Exonie	v	vij
Domina de York	iij	ij
Domina de Northfolk		iij
Domina de Huntyndon		iiij
Domina de Stafford	iij	v
Comes Marchie licet absens		xiij
Domina Kancie	iij	v
℞ Domina de Arundell	iij	v
℞ Domina Marchall	iij	v
℞ Comes Warwic	iiij	iij
℞ Comes Marchall	iij	iij
℞ Comes Ormound	ij	iij
℞ Domina Burgeveny	j	iij
℞ Dominus de Awdele		ij
Dominus Talbot	ij	ij
Dominus ffitz Hwh	j	ij
Dominus Pownynges		ij
Dominus Bowrceres	j	ij
Et reperiantur super compotum	ij	

Summa—ccxxij panni aurei

Inde liberantur domine Johanne nuper Regine Anglie xxiiij Et commutantur Comiti Marchie pro j toga panni aurei damasceni xiij panni Et liberantur domino de Bowrcer iij

Summa—xl panni aurei

Et remanent C^xx^iij ij panni qui deliberantur in vestibulum.

V.—*The High Terrace of the Thames: Report on Excavations made on behalf of the British Museum and H.M. Geological Survey in 1913.* By Reginald A. Smith, *Esq., F.S.A., and* Henry Dewey, *Esq., F.G.S.*

Read 2nd April, 1914.

The joint investigation of the deposits belonging to the 100-ft. terrace of the river Thames was continued last year under the same auspices as in 1912 at certain spots in the neighbourhood of Greenhithe and Crayford, respectively east and west of Dartford, Kent. Special facilities were again afforded by the Trustees of the British Museum and the Director of the Geological Survey; but the fund drawn on for this work is under the control of Sir Hercules Read, who in his dual capacity as President of the Society and Keeper of the British and Medieval Department of the British Museum is anxious to sustain the effort that is being made to bring archaeology into touch with geology, and is at the same time gratified to enlist the sympathies of unofficial workers by having the report presented to the Society.

The primary object of the investigations here described was to determine the stratigraphical position of a group of white ovate implements known as the St. Acheul type. Excavations in Barnfield pit, Milton Street, Swanscombe, during 1912 had left this point unsettled, no true implements of that character having been found in place, though many are reported to have come from the upper gravel and clay of that pit, and also from the shell-bed in Mr. Dierden's yard at Ingress Vale. By kind permission of the Associated Portland Cement Manufacturers, work was first resumed in Barnfield pit (formerly known as Milton Street pit), where the upper gravel and clay lie immediately below the soil and are difficult of access; but by cutting off successive vertical slices 44 ft. long from the working face on the west side of the pit, a large quantity was dealt with by four men under the personal supervision of the authors on four days in 1913. The upper gravel and the clayey gravel between it and the current-bedded sand yielded nothing of human origin, though a few black flakes occurred in the soil, and it becomes more and more evident that the upper gravel and the associated clay are not a true river deposit, but have been washed down from Swanscombe Hill (highest point, 320 ft. O.D.), where London Clay is dug and the lower Eocene beds are present. The upper section about the middle of the west side of Barnfield pit showed in descending order:

Soil, 20 in. thick.
Loose whitish gravel, 16 in. thick.
Clayey gravel, 4 ft. thick.
Thin seam of clay over Current-bedded Sand, etc. etc.

An opportunity was also taken of verifying other sections before proceeding to another site, and a clean section near the west end of the southern face of

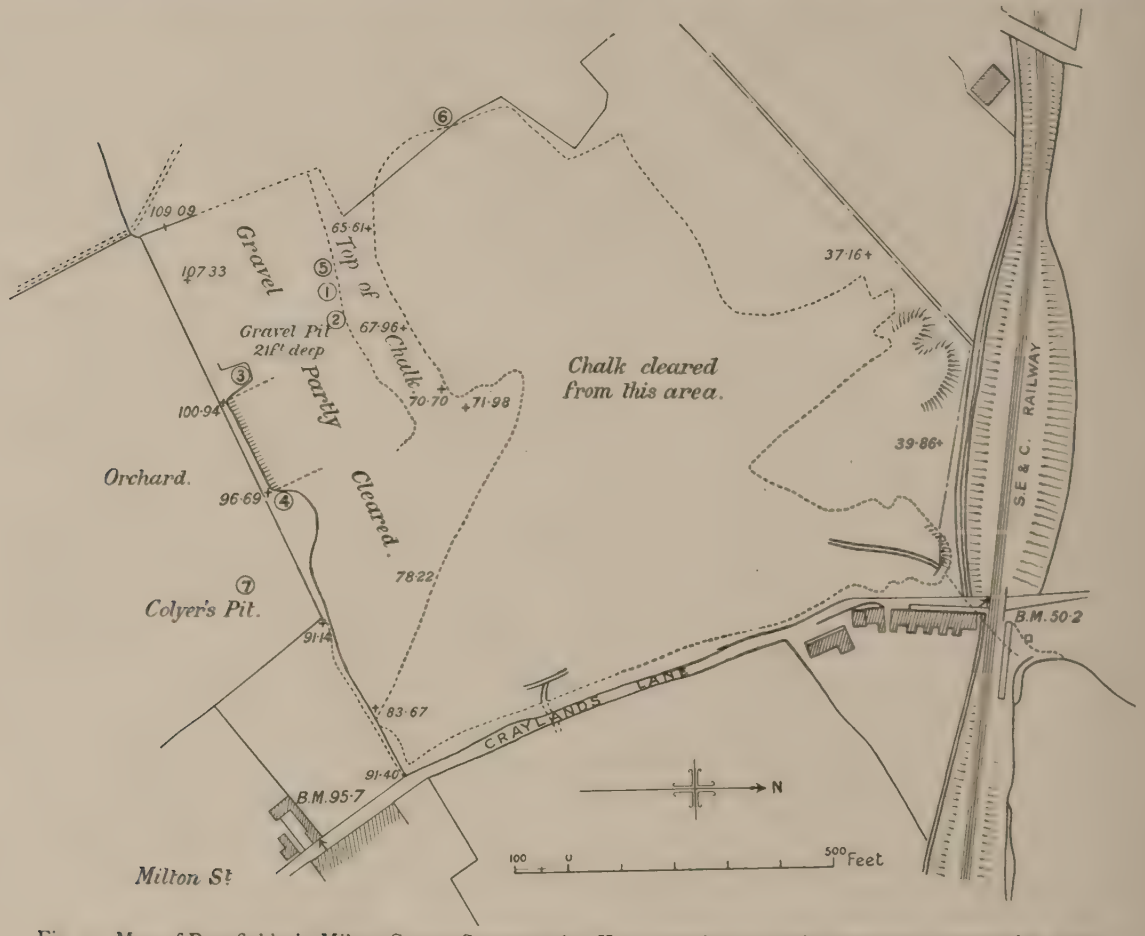


Fig. 1. Map of Barnfield pit, Milton Street, Swanscombe, Kent (*numbers in circles denote sites excavated in 1912*).

Barnfield pit (on the left of the section reproduced in *Archaeologia*, lxiv, 181, fig. 6) showed in descending order:

Soil and gravel, 5 ft. thick.
Shaley (Upper) Loam, purple brown, 5 ft. thick.
Current-bedded Sand, with black specks in upper part, 7 ft. thick.
Lower Middle Gravel, 4–8 ft. thick.
Lower Loam, about 24 ft. from the turf.

The top of the lower middle gravel was dipping at this point about 3 ft. in 22 ft. westward, and the bed was thinning out to its minimum of 2 ft., in which most of the Chelles implements occur. White implements are said to have been found near this spot between the current-bedded sand and the upper loam.

In Colyer's pit on the south side of the hedge (fig. 1) the false floor was penetrated at two spots to obtain complete sections, which were as follows:

Soil, 4 ft. thick.	Soil, 1½ ft. thick.
(Middle) Gravel, 10 ft. thick.	(Middle) Gravel, 7 ft. thick.
(Lower) Loam, 3 ft. thick.	(Lower) Loam, 3 ft. thick.
(Lower) Gravel (touched).	(Lower) Gravel (touched).

The occurrence of implements similar to those of the middle gravel of Barnfield pit is sufficient evidence that the gravel between the soil and loam-bed is of the same (Chelles) date, and the conclusion is that the upper beds of sand, loam, and gravel are wanting in Colyer's pit.

Further evidence of the relationship between the Pleistocene sequence and the stages of palaeolithic culture was obtained on an adjacent site not officially excavated. A pit at Milton Street, on the east side of Craylands Lane, where the cardinal points and scale are given on the plan (fig. 1), was opened two years ago, and shows above the chalk a section of the 100-ft. terrace-gravels to a depth of 14 ft. (fig. 2). Though separated only by the roadway from Barnfield pit, this pit has a full development of the upper gravel, which proved unsatisfactory further west. The section exposed at the time of our last visit is represented in the annexed diagram:

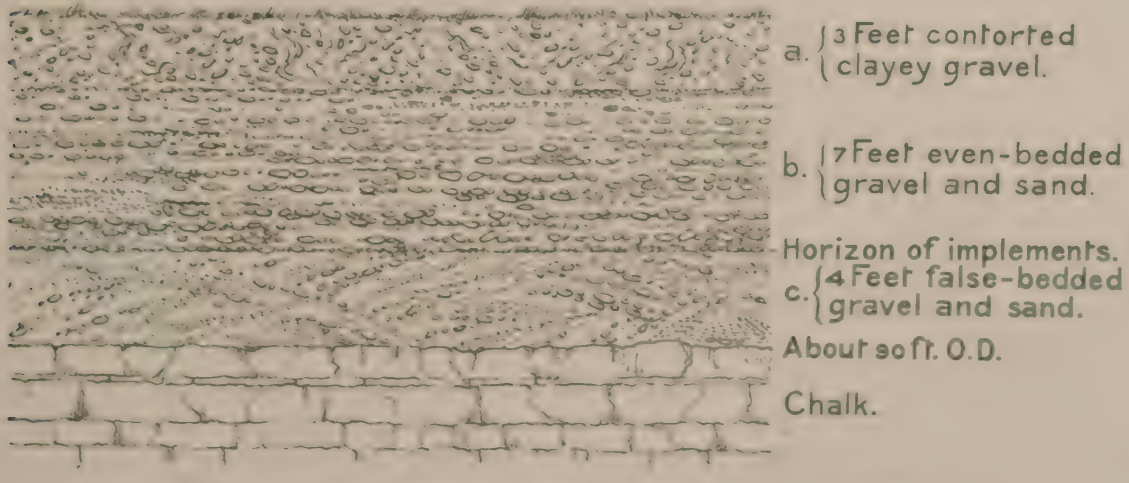

a. 3 Feet contorted clayey gravel.
b. 7 Feet even-bedded gravel and sand.
Horizon of implements.
c. 4 Feet false-bedded gravel and sand.
About 90 ft. O.D.
Chalk.

Fig. 2. Section of Pleistocene deposits, Craylands Lane pit, Swanscombe.

The height of the chalk shelf above Ordnance datum is here just over 90 ft. Current-bedded gravels and sand (*c*) rest on the chalk, and over these are 7 ft. of even-bedded red gravel. A few feet of contorted and rather clayey gravel (*a*) of a whitish hue lies in hollows on the surface of the even-bedded gravel (*b*). The workmen retained all palaeolithic implements found in these gravels, but only sixteen came to light in two years. These all occurred at one horizon, and are all of one type. One of the authors was present when an implement was found resting at the junction of the current-bedded and even-bedded gravels, and it was also at that horizon that the other implements were obtained. All are ovate in outline, and most of them are patinated white, although a few range from blue to black. Many have twisted edges in the form of a reversed S, and typical specimens are illustrated in the *Proceedings of the Geologists' Association*, xxv (1914), pp. 92, 94.

In the contorted clayey gravel of this pit numerous flakes are found, averaging 5 in. long and $2\frac{1}{2}$ in. broad. They are mottled blue and white, but show very little work on their edges. With large bulbs of percussion, they resemble the Levallois flakes of Northfleet (*Archaeologia*, lxii, pl. LXXIV).

The current-bedded sand and gravel are evidently continuous with that of Barnfield pit, but the even-bedded gravel is newer than any deposit met with across the road. The implements are also later than those found by ourselves at Barnfield pit. The earlier palaeolithic sequence seems therefore to be completely represented in the gravels of the 100-ft. terrace of the Thames, the two pits bordering Craylands Lane being complementary to each other in this respect, and the deposits ranging from pre-Chelles to Le Moustier times.

The Shell-bed at Ingress Vale, Greenhithe.

Adjoining Barnfield pit, on the north-west, is a narrow but fairly deep valley separating the gravels already examined from another series of gravels, sands, and loams lying at approximately the same height above Ordnance datum, on the opposite side of the valley. These beds have been worked near Ingress Tavern by Mr. Dierden, who afforded facilities for further examination of a bed that has attracted a good deal of attention in recent years. The well-known deposit of freshwater mollusca known as the Greenhithe shell-bed was exposed beneath some surface gravel, and contained, in addition to many species of molluscs, bones, tusks, and teeth of extinct mammalia. Several reports and accounts of this find have been published, but the fullest list of the fauna was given by the late Mr. Stopes, and is reproduced here from the Report of the British Association meeting at Southport (1903, p. 804).

Species from the Greenhithe Shell bed (Ingress Vale).

MAMMALIA.

**Bos primigenius.*
†Canis lupus.
Cervus elaphus.
†Cervus tarandus.
**Elephas antiquus.*
**Elephas primigenius.*
Equus caballus.
**Microtus amphibius.*
,, agrestis.
,, glareolus.
,, intermedius.
Mus sylvaticus.
**Rhinoceros leptorhinus.*
Sus scrofa.
**Trogontherium cuvieri.*

AVES.

Anas sp.

REPTILIA.

**Emys sp.*
Rana temporaria.
Tropidonotus natrix.

PISCES.

Anguilla anguilla.
Esox lucius.
Leucisius rutilus.
**Leucisius sp.*
Tinca vulgaris.

PLANTS.

Chara sp.

MOLLUSCA.

Agriolimax agrestis.
Carychium minimum.
Pyramidula rotundata.
†Pyramidula ruderata.
Helicella caperata.
Helix nemoralis.
Helicigona arbustorum.
§Cochlicopa lubrica.
Limnaea auricularia.
,, palustris.
,, peregra.
,, truncatula.
,, stagnalis.
Hygromia granulata.
§Hygromia hispida.
Vallonia pulchella.
Vitrea radiatula.
,, crystallina.
,, nitida.
,, nitidula.
Azeca tridens.
Pupa muscorum.
Caecilianella acicula.
Vertigo antivertigo.
Clausilia laminata.
,, perversa.
Succinea elegans.
Ancylus fluviatilis.
Planorbis albus.
,, carinatus.
,, contortus.
,, corneus.
,, glaber.
,, marginatus.
,, nautileus.
,, fontanus.
†Planorbis vorticulus.
Paludestrina ventrosa.
§Bithynia tentaculata.
,, leachii.
Vivipara clactonensis.
Valvata cristata.
,, piscinalis.

**Neritina grateloupiana* (*Theodoxia crenulata*).	§*Sphaerium corneum.*
†*Unio littoralis.*	*Pisidium amnicum.*
,, *pictorum.*	,, *astartoides.*
,, *tumidus.*	,, *fontinale.*
†*Corbicula fluminalis.*	,, *pusillum.*
	†*Pisidium supinum.*

Those marked * are extinct; those marked † are extinct in this country but living on the Continent; and those marked § occur also in the lower loam at Barnfield pit (*Archaeologia*, lxiv, 184).

The mammalian remains found at Ingress Vale are more numerous, both as regards species and individuals, than those found at Barnfield pit, but several species are found in both deposits, and there is no contradictory evidence. The sequence of the Ingress Vale deposits is shown in the accompanying sections, which are fairly uniform over the area tested, and agree closely with those on the eastern side of the Vale. From the nature of the beds, their height above the sea, and the flint industry represented, we conclude that the shell-bed represents the lower gravel and lower loam of Barnfield pit; and the richer fauna of the shell-bed confirms the conclusions already arrived at as to the age of the lowest gravel. While at Ingress Vale the shell-bed attains a thickness of 6 ft. and includes unbroken shells in abundance, the shell-deposits at Barnfield were reduced to a few marly lenticles in the lower loam.

An old section of the shell-bed, 6 ft. deep, on the west side of Mr. Dierden's stables (marked S—B on fig. 5) was continued northwards towards the railway, and showed the Section illustrated on the opposite page (fig. 3).

Reported finds of ovate implements in the shelly material made the situation critical, and every care was taken to avoid confusion of the beds in the search for human handiwork, but not a single palaeolithic implement was found, either on the west side of the stables or on the corner site in the angle of Knockhall Road and the new road to the school. The former spot is about 190 ft. west of the road opposite the tavern, and as previous discoveries were made when the ground was levelled for the stable-yard, we cannot have been working more than 100 ft. west or south of the prolific area. If nothing had come to light from the section we selected it would have been imprudent to reject the existing evidence of association, but the occurrence of no less than 500 obviously human flakes of a certain facies in a week's digging puts another complexion on the data, and not only gives a clue to the identity of the shell-bed horizon, but throws a new light on the implements found on adjoining ground.

The shell-bed flakes correspond in all essential features to the series from the lower gravel in Barnfield pit, and as the base of the Pleistocene deposits differs

in height only by 8 ft. on the two sides of the Vale (fig. 4), the conclusion seems irresistible that the shell-bed and lower gravel with its loam are contemporary, and originally formed a continuous bed. The point is an important one in view of strong evidence on the part of Dr. Corner, Mr. W. M. Newton, Dr. Marie Stopes, and other careful observers as to the inclusion of St. Acheul flints in the

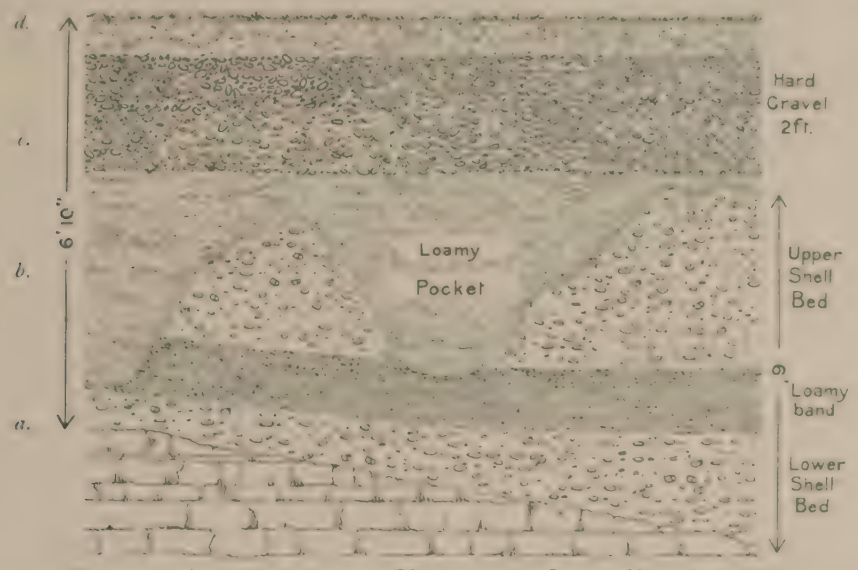


Fig. 3. Section behind stables at Dierden's yard, Ingress Vale, Greenhithe.

a. Light buff sand resting on chalk, full of flakes of the nacreous layer of Unio shells, with many shells of other molluscs, especially *Neritina grateloupiana*. Maximum thickness, 6 ft. Through the centre of the shell-bed ran a horizontal band of loam about 1 ft. thick.
b. Decalcified pipes penetrating the shell-bed, and in some cases almost reaching the chalk: these often had a group of struck flakes at the bottom.
c. Ferruginous gravel, current-bedded and partly contorted, 2 ft. thick.
d. Soil, 6–8 in.

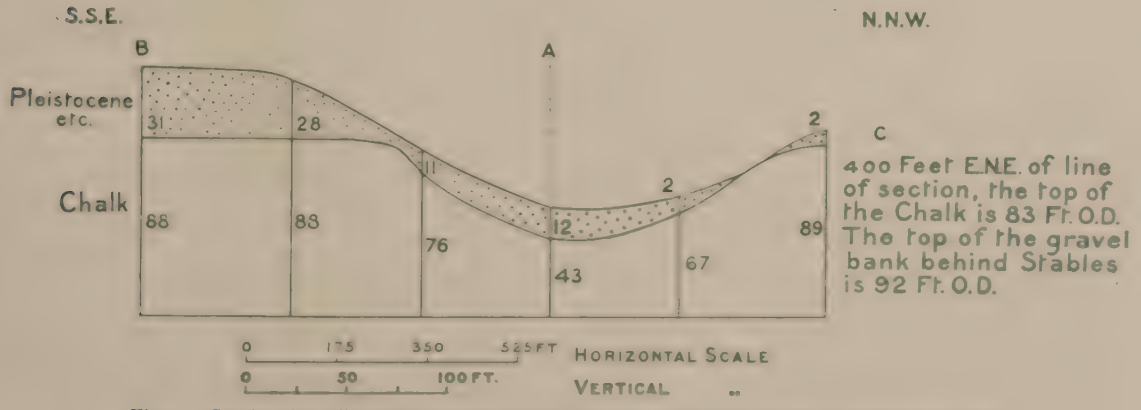


Fig. 4. Section from Barnfield pit to Ingress Vale, the numbers indicating thickness in feet.

shell-bed. The late Mr. Stopes devoted much attention to the site and its products, but did no excavation on his own account, and the only way to reconcile the testimony of eye-witnesses of such discoveries years ago with the results of the present excavations is to suppose that in the middle of the stable-yard (about 100 ft. from our site behind the stables) there was an implementiferous deposit intimately associated with the shell-bed, but dating from a much later period. That human relics deposited at the beginning and the end of the so-called Drift period should be found so intermingled is confusing, but not incredible; and without impeaching the authenticity of St. Acheul implements (some of extreme beauty) from the same yard, we can only insist on the evidence obtained under constant personal supervision a little further from the brow of the hill. The material removed from the yard about 1900 is stated to have been 14 ft. thick, but the section bared during our excavation on the west showed 6 ft. of shell-bed protected only by 2 ft. of gravel, which could easily have been replaced by a later deposit, not to mention the actual division of the bed by pockets of loam due to decalcification.

Through the kindness of Mr. Geo. Butchard we are able to give the levels of the shell-bed and Barnfield pit, and thus confirm by measurement the conclusions drawn from independent evidence. It was stated in 1900, in ambiguous language, that the shell-bed rested on the chalk at a level of 78 ft. O.D., the whole thickness being 14 ft., of which 10 ft. yielded shells.[1] Further light was thrown on this important point by Messrs. Kennard and B. B. Woodward, who described the shell-bed as about 14 ft. of sandy gravel resting on chalk, which is here 78 ft. O.D.[2] This would give a surface-level of 92 ft. O.D., which is found to be the level of the turf on the west of the stable, the site of our principal excavation. The base of the gravel there is $89\frac{1}{2}$ ft., and the stable floor, which is approximately the top of the chalk, 83 ft. The highest point in Barnfield pit (S.W. angle) is 110 ft. O.D., but the turf-level at the point where shells were found in the lower loam 21 ft. below is 104 ft. The base of the loam is here about 81 ft., and as that bed was 2–4 ft. thick it will be seen that the shell deposits on either side of Ingress Vale were approximately at the same level—at Barnfield 83–84 ft. O.D., and Dierden's yard 83–$89\frac{1}{2}$ ft. On the latter site the lower loam and lower gravel, as well as the Thanet sand, were wanting; but it was observed in our excavation that the flint flakes were most numerous at the bottom of the pipes which sometimes reached the chalk, and stratification apart from other evidence would therefore connect the flakes rather with the Lower than the Middle gravel of Barnfield.

According to Dr. Corner, sharp twisted ovates were found 3 ft. from the

[1] *Journ. Anthrop. Inst*, xxix (N. S. ii), 302.
[2] *Proc. Geol. Assoc.*, xvii, 238.

turf when the bank was being removed from the south side of Dierden's yard, north of the present wall. The discoveries took place when the yard was being extended from the southern boundary shown on the latest Ordnance map to the line given in fig. 5, where the present position of the wall is shown. The bank was originally continuous with that on the west side of the stables (the site of our excavations) and that across the road on the south, but was only about 5 ft. above the yard level, the shell-bed rising to 3 in. from the turf.

Fig. 5. Plan showing position of Barnfield pit and the Shell-bed (Dierden's yard).

Compared with the 35 ft. section of Barnfield pit the shell-bed is insignificant, and is indeed probably a mere remnant of successive deposits on the chalk shelf. That any portion of the shell-bed should be preserved is a rare piece of good fortune, since deposits over 20 ft. thick were to all appearance removed from above it by natural denudation after the Chelles period. The implements of the succeeding stage recovered from the site deserve more than passing mention, as they are not only good evidence of date, but excellent examples of the best Drift period.

As the Stopes collection acquired by the National Museum of Wales is still inaccessible pending the completion of the building at Cardiff, it has not been possible to identify the shell-bed flints mentioned in the brief report furnished to the British Association at Southport in 1903. It is, however, clear that the series differed entirely from the simple flakes found by ourselves, and a St. Acheul date is the earliest possible for some of the forms collected by Mr. Stopes.

The following list of types refers to discoveries in April, 1900:

(1) Ordinary axe or hache type.
(2) Fine smaller axe, of same shape.
(3) Broad leaf-shaped type.
(4) Ovate types.
(5) Boat-shaped type, pointed at each end.
(6) Discs.

(7) Large many-angled projectiles.
(8) Very fine-pointed stones as awls.
(9) Worked as if for graving tools.
(10) Worked as if to clear marrow bones.
(11) Scrapers, spokeshaves, and combined stones in all colours and shades of flint and patina — white, cream, ochreous, brown, and black. Many of them are derived and waterworn; many are glaciated.

Of these, nos. 1 and 2 are most probably Chelles types, and nos. 3 and 4 St. Acheul. No. 5 suggests rather a 'Thames pick', but the 100-ft. terrace is not the normal horizon of such implements. The discs (no. 6) are no doubt the common St. Acheul form, but no. 7 may be cores rather than implements. The rest are not described fully enough to date, but the smaller tools suggest the Cave-period. As to the patina, cream-white is normally the colour of St. Acheul implements in this locality, and common at the same horizon in the Somme valley; ochreous patina recalls the late Chelles implements from the plateau-gravel of the North Downs; and brown and black are the colours of the unrolled implements and flakes from the lower and middle gravels at Barnfield, where a few rolled and striated implements have also been collected. It is regrettable that the opportunity was not taken at the time of fixing the relation of the various types to the shell-bed proper.

In striking contrast to our rough flakes from the shell-bed are the remarkable implements secured years ago by Mr. W. M. Newton and other collectors. Several were exhibited in illustration of the paper, and a subsequent examination leaves no doubt that Mr. Newton possesses some of the best flint-work in existence. Some of his shell-bed specimens have already been published,[1] and most are characteristic St. Acheul forms. One in particular, of the well-known Swanscombe flint with black knots, is of oval form with a pronounced twist like a reversed S, and measures $5\frac{1}{2}$ in. in length, in perfect condition. There are other cordate or pointed oval implements with twisted or straight edges, and one has a broad cutting edge at the top, called in French *en biseau*. The English word 'basil' may be used as an equivalent. There are also two ridged tools, one made from a thick flake, that may be contemporary; but a large round scraper (*racloir*) would by itself be assigned to the period of Le Moustier. Among the derived specimens may be mentioned a hand-axe of remarkable lustre, with squared butt (like many Chelles specimens at Swanscombe), and incipient bulbs due to battering all over the surface. The specimens are of various colours, but, apart from those derived, are quite unrolled; and probably date from St. Acheul II, though they appear to be, on the whole, somewhat earlier than those from Wansunt (p. 207). Mr. A. E. Relph's fine series from

[1] *Man*, 1901, no. 66.

Globe pit, Greenhithe (*Archaeologia*, lxiv, 103), contains many parallels to the shell-bed implements, and comes mainly from the brick-earth, only one implement, different from the rest, having been found in the gravel there. This is another argument for the late date of the shell-bed implements.

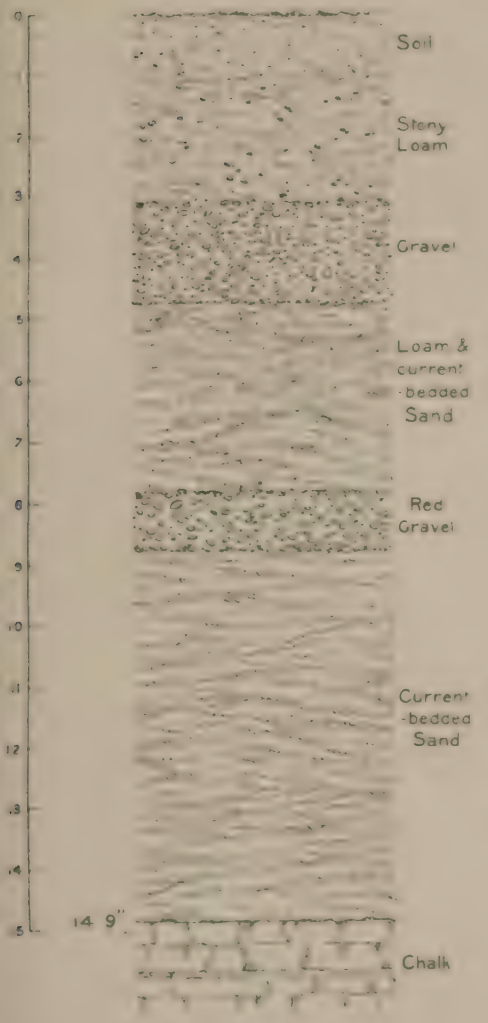


Fig. 6. Shell-bed section, site A.

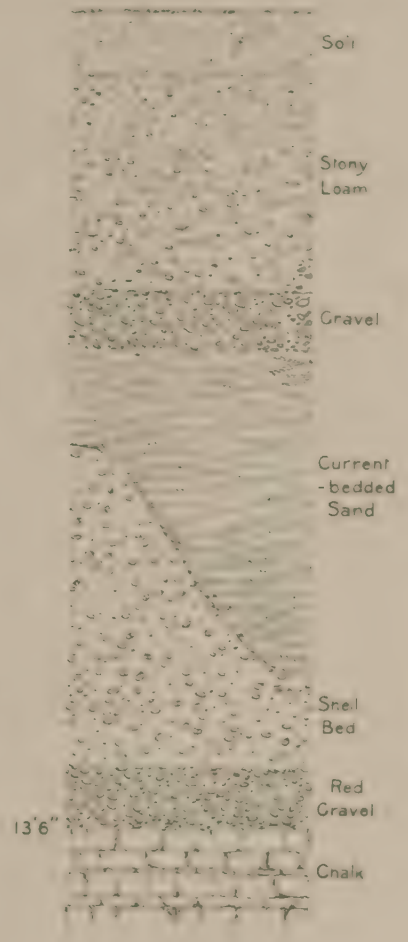


Fig. 7. Shell-bed section, site B.

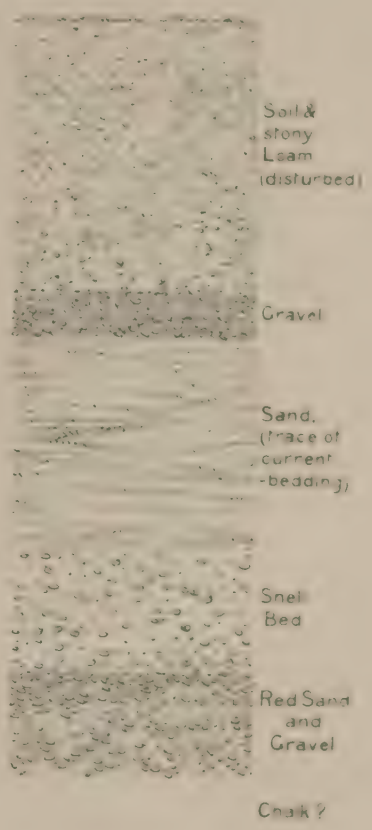


Fig. 8. Shell-bed section, site D.

As there remained a vacant plot at the corner of the road south of Dierden's yard, we took the opportunity of excavating some of the undisturbed material, especially as large shells were said to have been found at the north point. At C pure sand was at once struck at the road-level, and dug to about 2 ft., where large white masses simulating mammalian bones were encountered, but even-

tually proved to be 'race', calcareous concretions[1] frequent in sandy deposits, especially in brick-earth and loess.

The other pits A, B, and D were dug to expose complete sections from the original turf-level to the chalk, the bank not having been cleared away at these points. The sections are shown in the accompanying diagrams and, as might be

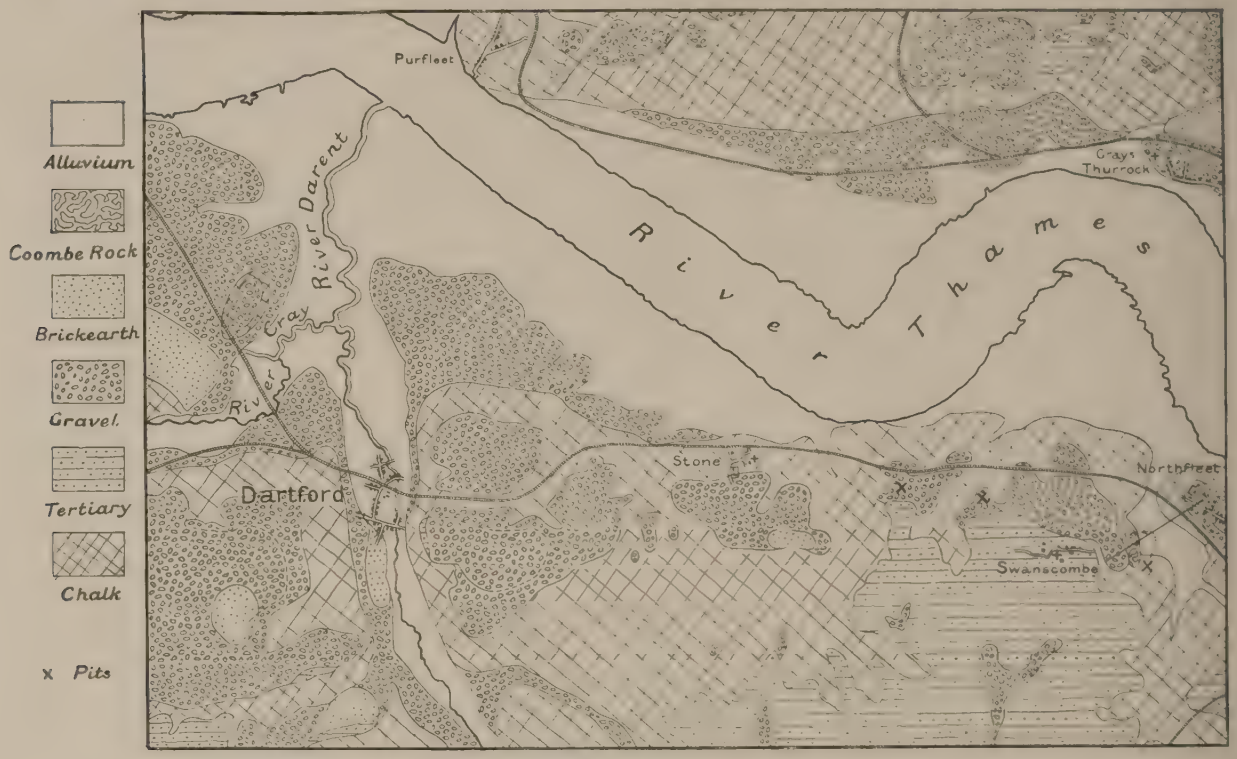


Fig. 9. Geological map (1 in. scale): the Shell-bed adjoins the railway, midway between the crosses NW. of Swanscombe; and Wansunt pit is on the edge of the map due west of Dartford.

expected in so small an area, correspond almost exactly, but did not contain a shelly bed at all approaching in interest or thickness that alongside the stables, about 150 ft. to the north. The chalk was found at about 14 ft. in the angle of the roads, and the thickness of the Pleistocene deposits agrees in this case with that given for the shell-bed in the middle of Dierden's yard; but the shelly bed included in sections A, B, and D was neither important nor prolific. The difference between the thickness of our sections behind the stables and at the angle of the roads is easily accounted for by the slope of the chalk towards Ingress Vale (fig. 4).

[1] Defined by Mr. Spurrell as calcium carbonate mixed with arenaceous and argillaceous particles, with a little iron and phosphoric acid (*Proc. Geol. Assoc.*, xi, 223).

The finds were unimportant, but a few heavy flakes like those from our shell-bed excavation were lying under the first band of gravel, about 6 ft. from the turf; also a number of pebbles covered with layers of calcareous deposit. Though not in themselves significant, these coated pebbles may be compared with French examples found, for instance, in the Carpentier pit at Abbeville, of which a section is given in *Archaeologia*, lxiv, 108. Professor Commont[1] compares them with the *dragées* of confectioners, and mentions them as constituents of the white marl bed M. As will be seen from the parallel sections given on p. 200 of last year's report, this bed occurs just below the Chelles level, and corresponds to the white marl in the loam above the lowest gravel at Barnfield pit. This is additional evidence that the shell-bed and some of the associated deposits correspond to the lowest strata of the 100-ft. terrace.

The 100-ft. Terrace at Wansunt Pit, Crayford.

Wansunt pit is situated about ½ mile south of Crayford railway station, on the west side of the road to Dartford Heath, of which it forms the northern extremity (fig. 101). The gravel dug in the pit forms part of a widespread tract which covers Dartford Heath and the neighbourhood, the whole forming a plateau 120–130 ft. above Ordnance datum. Most of the area is flat, but here and there low mounds rise from it to a height of 130 ft. O.D. The sub-soil is gravel composed of the following constituents, which are arranged in two groups according to the place of origin:

From the south: Lower Greensand chert, lydite, sandstone, grit, Kentish rag, Tertiary pebble conglomerate, ironstone and flints from the Chalk, and Tertiary pebbles.

From the north and west: Bunter quartzite, crinoidal chert (Carboniferous), Rhaxella chert (Arngrove stone), tourmaline grits, sarsen, pink granite, mica schist, vein-quartz, and various igneous rocks.

The gravel lies evenly either upon Thanet sand or Chalk, but rests locally in channels cut in these formations. The height above O.D. of the base of the gravel is 60–100 ft., the deposit varying in thickness and being divisible near Wansunt into an upper even-bedded stratum, 12 ft. thick, and a lower stratum, 25–30 ft. thick, of current-bedded sandy gravel, frequently cemented at the base.[2]

Brick-earth overlies the gravel in places on the Heath, and at Wansunt this deposit varies in texture, the lowest layers being tough homogeneous clay, while the higher parts become loamy or silty. The relation of the loam to the underlying gravel is evident at Wansunt. On the southern working face of the

[1] *Les Gisements paléolithiques d'Abbeville* (Lille, 1910), 256.

[2] R. H. Chandler and A. L. Leach, *Proc. Geol. Assoc.*, xxiii, 103, and xx, 122.

pit the loam fills shallow channels cut in the gravel, but expands into a wide-spread mass on the north side. A section was described by Messrs. Chandler and Leach, who inferred that it represented the southern bank and the alluvium of a tributary of the main river, the latter then flowing at a lower level than

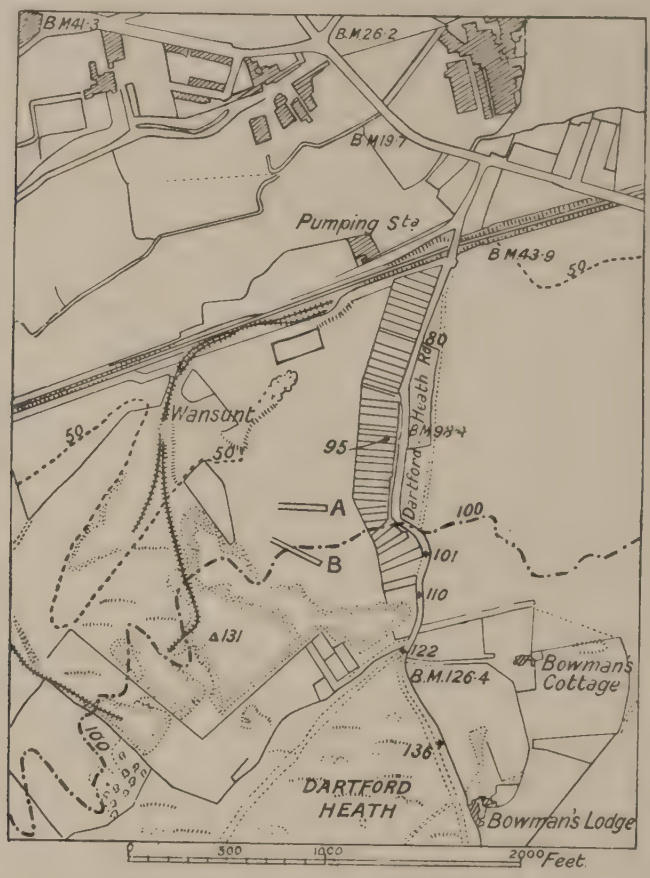


Fig. 10. Plan showing position of Wansunt pit and trenches A and B.

its ancient terrace-gravel; but they pointed out that the northern bank was not exposed, and suggested that its position was a short distance from the working-face. The occurrence, in the brick-earth of the supposed channel, of implements of late St. Acheul form rendered the substantiation of this hypothesis desirable, and in consequence the authors dug two series of pits with the object of intercepting the channel and proving its breadth, depth, and direction. The excavations on the eastern line (fig. 11) failed to reach the gravel within 100 yards, but in pit IV at 6 ft. from the surface was found a bed of silver sand, which in the next pit (V)

was seen to be 2 ft. thick, and to rest on the gravel we were in search of, at a point about 70 ft. west of the garden fence. This showed a drop of 18 ft. in about 125 yards, and the pits between the extreme points would in all probability have revealed the outcrop of gravel if there had ever been a northern bank where now the ground slopes down towards the Thames.

The two great cuttings A and B (fig. 10) made by the late owner of the pit are valuable geologically even if they do not solve the problem of the clay-deposit. The former runs almost exactly east and west, and is about 500 ft. north of our line of excavations on the clay platform. It shows at the east end a band of gravel dipping southward, between Thanet sand and a tongue of loam with overlying soil about 8 ft. thick. The lateral sections, each 83 yards long and tapering from 17 ft. at the east end to the floor at the west, show that the top

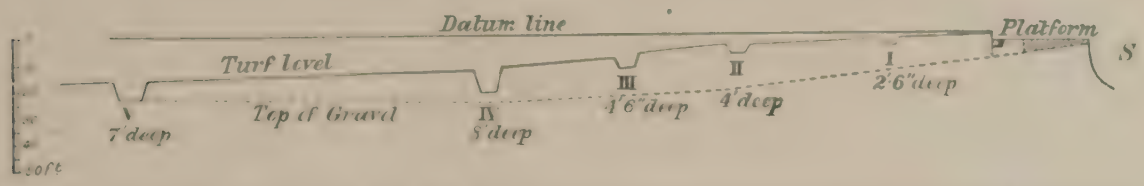


Fig. 11. East section running north from edge of Wansunt gravel-pit, showing trial-holes and supposed top of gravel.

of the Thanet sand dips south-east, and there is a thicker deposit of stony loam on the south than on the north face. As the general slope is away from the Thames, it seems clear that these deposits are due to drainage westward into the Cray valley, and have no relation to the terrace-deposits more than 30 ft. above their present summit. The same appears to be true of the other cutting (B), which runs about NW. and SE., and at its highest point is about 16 ft. below, and about 220 ft. north of, the clay platform. This section has been more thoroughly examined,[1] and shows Thanet sand about 12 ft. from the surface at the south-east end, with a band of concreted gravel, looser gravel, and stony loam in ascending order, the last-named being confined to the lower end of the cutting, where the ground slopes towards the Cray valley.

The sections in the south trench present a similarity on the two faces with only subordinate differences. The surface of the Thanet sand is corrugated, the small channels being infilled with gravel. This gravel consists mainly of pebbles from the Tertiary beds, with pellets and clots of clay of various colours, some being mottled and laminated; also sarsen stones, quartz and chert, but not many sub-angular flints. The characteristic feature of this gravel is the presence in it of the clots and pellets of clay and sand, measuring up to 2 ft. in length.

[1] *Proc. Geol. Assoc.*, xxiv, 341, 343.

which are not greatly disintegrated. The stones lie flat, giving an appearance of even-bedding to the gravel, which is also conspicuous in the overlying bed of gravel. The lower gravel merges upwards into a bed with lenticles and seams of sand strongly current-bedded, and this is surmounted by gravel with traces of even bedding. At about 25 yards from the east face of the trench all these subdivisions die out except the lowest, and merge into a vaguely current-bedded mass.

The top of the Thanet sand in this trench maintains a fairly uniform height for about 60 yards on the north side and then suddenly slopes at a high angle to the west. This slope marks the position of the stream which undercut its bank. The southern face is similar except at its western end, where loam cuts out all but a foot or two of the gravel and is itself overlain by stony loam.

When these deposits are compared with the northern trench a complete dissimilarity is seen; for, in place of the well-marked sequence of gravels, there is only one thin bed of pebbly gravel overlying the Thanet sand, and itself covered by a nondescript accumulation of stony loam or hill-wash. Indeed, there is probably in the northern trench no trace of the true Dartford Heath gravel. The trench itself is cut at the bottom of a hollow or side valley sloping towards the west, and may have been formed by a stream draining the main terrace, and afterwards infilled with the stony loam. At its eastern end there is what appears to have been the margin of a stream which slopes south and is overlain by a thin bed of pebbly gravel; this is traceable for about 30 yards on the northern side of the trench but is not seen on the southern side, except at its west end, where it is exposed for a distance of 25 yards sloping towards the north-east. These two exposures may therefore represent the two banks of a narrow channel draining north-westwards, long subsequent to the period when the 100-ft. terrace was formed.

Renewed excavation of the gravel by the company has shown the structure of its main mass to be similar to the section described by Messrs. Chandler and Leach.[1] The top 20 feet are even-bedded sand, with thin beds of reddish gravel; and 35 ft. of strongly false-bedded gravel lie beneath it. This is said to be underlain by another 10 ft. of clayey gravel, making in all 65 feet deposited on the Thanet sand. The top of the gravel at the new pit is, however, many feet higher than the top of the gravel at the 'Channel'. This difference of level is well seen from Heath Side, and before the gravel was removed, the surface slope must have been gentle. A few yards farther north and near the two trenches there is another conspicuous feature due to the flattening of the surface slope. If the brick-earth alone had been removed the gravel would

[1] *Proc. Geol. Assoc.*, xxiii (1912), p. 103.

probably have shown a sharp slope or low cliff facing north, and it was part of this cliff which Messrs. Chandler and Leach figured in the paper quoted above. This feature they traced for a distance of 1,000 ft. along the northern edge of Wansunt pit and were led to suggest that it was the south margin of a channel which ran east and west.

From the existing topography it seems probable that this low cliff was produced by the river cutting into the gravel of the 100-ft. terrace. The lip of the channel is at about 100 ft. O.D., whereas the surface level of Dartford Heath, near Bowman's Lodge, is 135 ft. O.D., and 120 ft. O.D. at Heath Side. The river had therefore removed at least 26 ft. of gravel before it deposited the brick-earth and loam. There is no means of ascertaining the lapse of time that such an amount

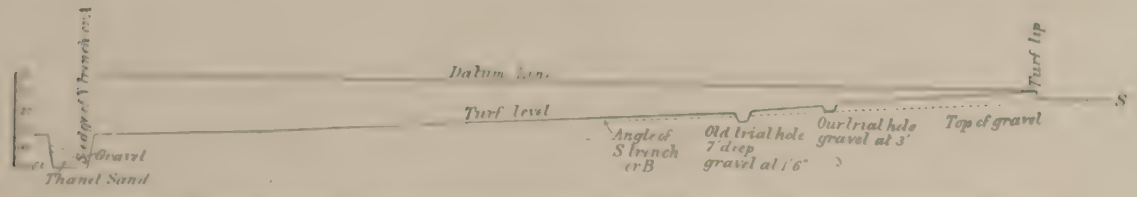


Fig. 12. West section at Wansunt running north to trench *A*, showing trial-holes and top of gravel.

Fig. 13. Plan of clay platform north of the east end of gravel-pit, Wansunt, Crayford. (Sites *a*- were excavated.)

of erosion would take, but it may represent a considerable interval. In that case a somewhat later date than the 100-ft. terrace deposit would have to be assigned to the Wansunt brick-earth.

The nature of the platform, which had previously been cleared to the depth of 6 ft., was ascertained by means of two trenches *a* and *b*, respectively 26 ft. and 23 ft. long and 3–4 ft. wide, which showed that the top of the gravel sloped rapidly northward, the gradient being 1 ft. in 6 or 7 ft. (fig. 15). The material removed was rather stiff clay, which passed into a sandy layer about 3 in. thick, just above the gravel. The deposits originally lying on the gravel were represented in section on the north and east edges of the platform, and the face was cut back in several places (fig. 13, *c* to *f*) to test the stratification and reach the

gravel below if possible. A certain number of flint flakes were found but very few implements, and a typical section is given below (p. 207). At the point *j* the face showed the following succession downwards from the turf:

6 ft. section
- 28 in. of loam with pebble-patches (hill-wash);
- 3–6 in. seam of blue clay;
- 22 in. of sandy loam;
- 18 in. of loam with seams of bluish-grey clay.

The lip of gravel[1] was traced along the edge of the platform 5–6 ft. below the original turf-level, and is indicated by a dotted line in fig. 13. The line is practically east and west, and similar sections might have been expected in the western line of trenches (fig. 12), but here the clay deposit was less extensive towards the north, and gravel was found at 3 ft. from the turf about 45 yards north of the lip. Twelve yards farther north the gravel was $1\frac{1}{2}$ ft. from the turf, and in the same line falls the eastern end of the large trench B, where the gravel extended practically from the surface to the Thanet sand, which is nearly 13 ft. below the turf. Between this and trench A runs the 100-ft. contour line, and when the gravel is found again in the northern trench it is under loam, and consists of a band 15 in. thick, sloping towards the south, and suggesting an ancient channel. The gravel rests on Thanet sand, which is here about 40 ft. below the gravel on the platform, or about 75 ft. O.D. The contrast between the sections revealed by the two lines of trenches is very striking, and if there had been a broad river flowing across the eastern line it is difficult to account for the slight amount of loam 108 yards to the west on the same level.

Our excavations therefore give little support to the theory of a northern bank to contain an east and west river in a channel of gravel subsequently filled with loam; and an alternative explanation is that the brick-earth was the last deposit laid down by the main river on the 100-ft. terrace. It had by that time lost its power of carrying coarse material, and could only bring down the finest mud, which it dropped in quiet backwaters, or during floods beyond its banks. The Thames, therefore, was not flowing at a lower level than the 100-ft. terrace gravels (as would be necessary if one of its tributaries was flowing east or west at that elevation), but no great depression of the land was required to bring about this result, as the gravels were probably swept down from the high ground and spread out fan-wise over the flats. When the carrying power of the river declined sand and mud would be deposited over the coarser material.

It is stated by Messrs. Chandler and Leach that a channel could once be

[1] This is well seen in Mr. Chandler's photograph in *Proc. Geol. Assoc.*, xxiii, pl. 18.

traced in section at the east end of Wansunt pit parallel to the hedge of Station Road, but this has since been obscured, and was not seen by ourselves, nor, indeed, does the diagram of it given in *Proc. Geol. Assoc.*, xxiii, 109, enable us to decide between a river-channel and a terrace-deposit. The balance of evidence, however, seems in favour of the latter, and the accompanying diagram of the terrace-deposits of the Somme, combining the sections seen at St. Acheul and Montières, suggests that what happened near Amiens may also have happened on the Lower Thames. Prof. Commont's researches have already enabled us to draw some striking parallels between the two rivers (*Archæologia*, lxiv, 200), and a flood-deposit such as loam or brick-earth is naturally the last laid down by the river on its various terraces.

Fig. 14. Quaternary Deposits of the Somme Valley (*after Commont*). Combined section of the second or 100-ft. terrace at St. Acheul and the low or 35-ft. terrace at Montières, near Amiens, the sunk channel from which the heights are reckoned being 43 ft. O.D. at St. Acheul, and 33 ft. O.D. at Montières.

RECENT DEPOSITS:

A¹. *Limon de lavage.* Hill-wash (neolithic, Roman, etc.).
t.n. *Terre noire de marais.* Black marsh mud (Roman).
Terre grise de bordure. Grey mud (early neolithic).
Tuf. Tufa (neolithic, Bronze and Early Iron Age).
t.a. *Tourbe ancienne.* Early peat (neolithic, Robenhausen period).
T. *Tourbe.* Peat.

QUATERNARY LOAMS:

Late loess (hatched right-to-left).

- A *Terre à briques.* Brick-earth.
- B *Ergeron supérieur.* Upper loess.
- C *Cailloutis.* Seam of pebbles.
- B^1 *Ergeron moyen.* Middle loess.
- C^1 *Cailloutis.* Seam of pebbles.
- B^2 *Ergeron inférieur.* Lower loess.
- *Cailloutis.* Seam of pebbles.

Early loess (hatched left-to-right).

- D *Limon rouge.* Red laminated loam.
- E *Limon à points noirs.* Loam with manganese spots.
- F *Limon roux sableux, cailloutis à la base.* Red sandy loam, with seam of pebbles at base.

RIVER ALLUVIUM (horizontal hatching):

- gl. gl^1 gl^2 *Glaise de divers âges.* Clay of different dates.
- K *Sables fluviatiles.* River sand.
- L L^1 L^2 *Graviers fluviatiles de divers âges.* River-gravels of different dates.

Whether the clay capping the gravel of Wansunt pit was deposited by the Thames or one of its tributaries (the Cray) flowing parallel to it at a distance of $2\frac{1}{2}$ miles seems a matter of secondary importance, the main point being that the Thames was flowing at or about 100 ft. O.D. in late St. Acheul times. A sluggish tributary depositing clay cannot have been more than a few feet above the main river at a point so close to their junction. The Thames may or may not have kept at a fairly uniform level throughout the Drift period, but a comparison of the implements from Wansunt and the two Milton Street pits proves that the whole Drift sequence is represented in the deposits of the 100-ft. terrace. The period of Le Moustier, which is included by some authors in the 'Drift' series, seems to be best represented on the terrace below (at Crayford[1] and Northfleet), and the last deposit at the upper level would therefore be of St. Acheul II date, if the palaeolithic industries of this country agree with the continental classification. The Wansunt finds come from different levels and are not easy to classify, but those from the clay deposit are homogeneous, and show the results achieved in flint-working at the close of the so-called Drift period.

[1] *Man*, 1914, nos. 4 and 31.

FLINT IMPLEMENTS FROM WANSUNT.

Our first find was a small ovate implement 2 ft. deep in the clay of the west trench *a* (fig. 15), and therefore about 8 ft. below the original turf-level. It lay in a

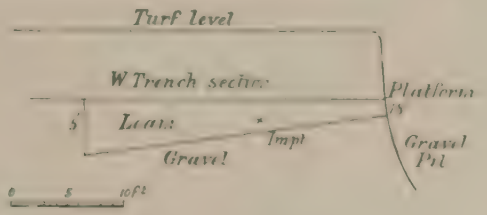


Fig. 15. Section of trench *a* on clay platform, Wansunt pit.

thin sandy bed 3 in. thick, in which most of our flakes were found, about 6 in. above the top of the gravel which here dips towards the north. Views of its two faces and one edge are given (fig. 16), and it is only necessary to add that the edges are quite sharp, the chipping unequal (one edge being zigzag and the other a slight but regular curve), and the colour a brownish grey with lighter markings. The flakes are equally sharp, and blue-black or bluish white, approaching in colour (though not so large as) those from Globe pit, Greenhithe, secured in 1912.

The pit sunk at the foot of the east wall of the clay platform (*c* on plan) produced at the same level as before a twisted ovate implement (fig. 17) 2·2 in. long, of a bluish-white colour; sharp and unrolled, but broken across the top, where it was somewhat pointed. The curve on the sides is, as usual, a reversed S and the cutting edge originally passed all round.

The third typical implement (fig. 18) is somewhat heavier than the others, but of the same type and equally sharp. The cutting edge passes all round, and the sides, though rather zigzag, are, on the whole, curved in the usual direction. The colour is black passing into light brown, with paler knots. It measures 2·4 in., and was found 5 ft. from the turf at the point *c*, where the section showed:

Turf and soil, 9 in.
Sandy loam with irregular seams of blue clay, 4 ft.
Seam of stones, including the implements.

Mr. J. Davis, whose house adjoins Wansunt pit, has fully availed himself of his opportunities and made an interesting collection, which he was good enough to exhibit and lend for examination. From the junction of the clay and gravel he recovered a fine blade-scraper of purplish grey flint, along with seven

flakes which fit together and show that they were flaked on the spot. The clay deposit, more especially its upper part, yielded a large series of implements referable to the period named after St. Acheul, comprising the latter part and close of the Drift series; and selected specimens are reproduced on the accompanying plate.

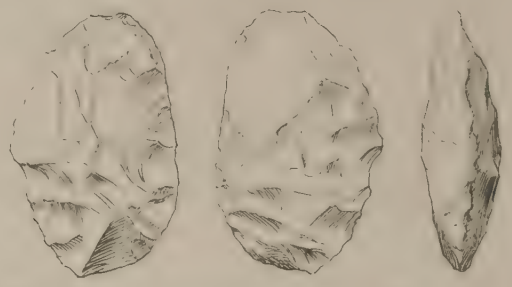


Fig. 16. Ovate flint implement found above the gravel, Wansunt pit, Crayford. ($\frac{2}{3}$)

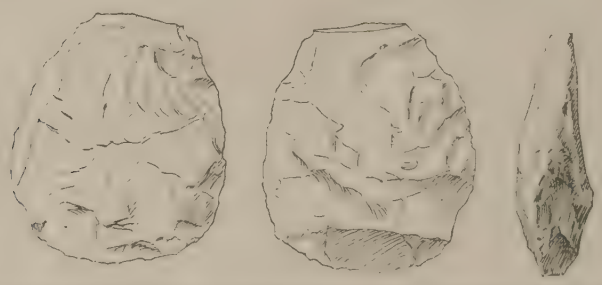


Fig. 17. Ovate flint implement, east end of platform, Wansunt pit, Crayford. ($\frac{2}{3}$)

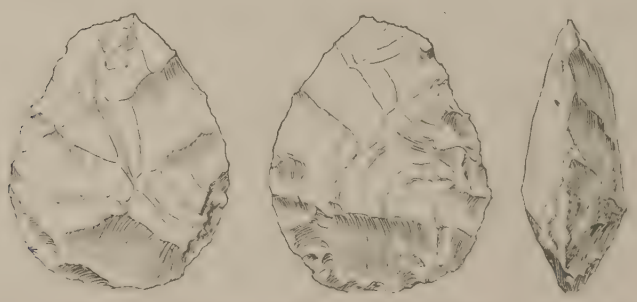


Fig. 18. Cordate flint implement found 5 ft. deep, Wansunt pit, Crayford. ($\frac{2}{3}$)

Description of Plate XXIII.

Fig. 1. Elongated pointed oval implement, bluish grey with yellow knots, sharp edges both with reversed S curve. L. 5·5 in. Found when the clay was first removed, 3 ft. to 4 ft. below the surface, with other implements.

FLINT IMPLEMENTS FROM WANSUNT PIT, CRAYFORD (½)

Collected by Mr. J. Davis

Published by the Society of Antiquaries of London, 1914

Fig. 2. Implement of Le Moustier type made from a flake, the bulbar face and bulb trimmed flat, sharp straight edge all round. L. 3·2 in. Found with flakes 3 ft. to 4 ft. below the surface.

Fig. 3. Disc of yellow flint with patch of crust interrupting the sharp edge, both faces convex. L. 2·5. Same position as fig. 2.

Fig. 4. Yellowish grey ovate implement with one straight and one curved zigzag edge, and sharp butt. L. 3·7 in. Found with flakes 3 ft. to 4 ft. deep.

Fig. 5. Triangular implement, brown and black with yellowish knots, cutting edge all round, and sides with reversed S curve. L. 2·8 in. Same position as fig. 4.

Fig. 6. Pale yellow ovate implement, symmetrically chipped, with strong reversed S curves, sharp butt and one face flatter than the other. L. 3 in. Found at the east end of the clay deposit.

Fig. 7. Bluish-white implement with strongly curved sides and sharp butt. L. 2·9 in. From the clay deposit.

Fig. 8. Pointed implement with sharp butt and straight edges, yellow and yellowish grey. L. 5·2 in. Found about 2 ft. in the clay at 3 ft. to 4 ft. below the surface.

Besides these, Mr. Davis has sixteen implements known to have been found 3 ft. to 4 ft. from the surface in the clay deposit, and nearly as many more probably from the same deposit but collected before the stratification was noted. They are all unrolled, though some have much sharper edges than others, and the patination varies. Most are mottled black and grey, but a yellowish brown is common. One cordate implement has a pinkish cream patina, and another of peculiar form is dull white with a yellowish knot, which has begun to take a bluish patina. Nearly all would be classified, even apart from associated specimens, as of the St. Acheul period, the ovate or cordate form ranging in length from 2 in. to 4½ in. On three specimens can be detected signs of use on one face of the side-edge recalling the side-scrapers of Le Moustier date, and one flake is an excellent example of the *racloir*. Several are imperfect, but in some cases two parts of an implement have been found and re-united. One long nodule has been flaked at the end into a form suggesting the celt, and another remarkable implement of pointed oval section has almost parallel sides, the broader end being fractured obliquely. The narrow end and the sides are provided with a cutting-edge none too regular or sharp, and it is unfortunate that there is nothing but the workmen's testimony that it was found with a large number of small flakes (in the same collection) below the surface in the clay deposit, nearer the road than we were working. It would inevitably

be classified as an unfinished neolithic celt by those unfamiliar with recent discoveries in the gravels and brick-earths of southern England. Another point of interest is the presence of two crusted platforms interrupting the lateral edges of a roughly chipped ovate tool from the clay deposit. It is slightly constricted below the middle line, and may be a precursor of the waisted tool found in some quantity on the surface near Blandford, Dorset, and sporadically in the chalk area of south-east England.

Flakes from the same level of the clay are mostly bluish grey, the more deeply patinated being white with bluish knots,[1] like the implement referred to above. There is an iron deposit on one which has not stained the flint. Several show side-edges used in the manner of Le Moustier, and there are specimens of the porcellanous gloss best known from Savernake Forest. One round-scraper with somewhat abrupt edges might give a wrong impression of the date if not found in association with definite palaeolithic forms, and a point to be noticed is that the striking-platforms are normally plain, not faceted.

A small white implement from this collection, of ovate form with a cutting-edge on the broad end and the narrow end left thick, was found in the clay 3 ft. to 4 ft. from the surface, and is believed to have been associated with those in the possession of Mr. W. M. Newton, whose collection includes some remarkably fine examples from this site, smaller on the average than those already mentioned from the shell-bed, but obviously belonging to the same great culture.

No less than twenty-eight implements[2] in his collection come from the clay deposit at Wansunt, and a pure white specimen with a pronounced twist must be one of the finest pieces of flint work in existence. Like the majority, it is of cordate form, the edges being exceptionally thin and regular. There are true ovals, pointed ovals, almond and pear-shaped specimens, the last being thin, of yellow-grey stone with paler knots. One fine example of greyish dove-colour has a basil point (*en biseau*), and all are sharp, patches of gloss being not uncommon. Many are grey and some unchanged, but as a group they fall readily into St. Acheul II.

The gravels of trench B have proved most prolific, but throw little fresh light on the problem of the clay deposit. Mr. Davis has twenty implements and flakes, of various forms and colours, with and without lustre and patination. The largest is a thick ovate (*limande*), cracked all through and imperfect at the top, where a large piece has been removed, probably by frost. The implements are mostly ovate and cordate, some being of excellent workmanship, and often twisted. Some of the flakes seem to be derived and much resemble

[1] Apart from the patina, the nature of the flint seems much like that of the early Drift implements from the lower gravels of the same terrace at Swanscombe.

[2] Several are figured in *Proc. Geol. Assoc.*, xxiii, 109.

those from Swanscombe. If the date of the deposit is to be based on the latest form included in it, special importance must be attached to a creamy-white implement made from a flake with the crusted striking-platform retained, and a thick brown flake which is a good example of the 'point' of Le Moustier. On the whole this series agrees closely with that from the clay deposit higher up the slope, but a fine brown ovate taken out of the gravel at the south-east corner by Mr. Malcolm Andrew at a depth of 7 ft. suggests that St. Acheul I is also represented in this trench. He has also a pear-shaped implement with one flattish face, mottled grey-black, with sharp edges, that was lying 5 ft. above the Thanet sand about 35 ft. west of the other. Several of this form occur in the Middle gravel at Swanscombe on the same river-terrace.

Some reference will be expected to the gravel on Dartford Heath, which must be closely connected with one or more of the gravel horizons at Wansunt. No flint implements are known from the base gravel of the pit, whether in the south-east angle where our observations were principally made, or in other parts formerly dug for gravel. From the gravel on the Heath Mr. Davis has some heavy flakes with white patina and thin buff crust, the long edges slightly jagged from use, and all comparable to flakes from Globe pit, Greenhithe, except a flat pear-shaped implement with the point broken, which has double patination, the latest edge-chipping showing blue-grey. Though its rough flaking might suggest an early date, it should be noted that this implement is made from a flake, the platform and bulb of percussion still being visible. Dartford Heath itself, though formerly considered a terrace-deposit higher and older than the 100-ft. terrace, has in the past yielded a certain number of palaeoliths; and Sir John Evans[1] illustrated a fine example, just over 4 in. long, found by Mr. Spurrell 'at a depth of 8 ft. below the surface of the gravel, which is that of the upper level of Dartford Heath and appears to belong to the valley of the Thames, and not to that of either the Cray or the Dart (Darenth)'. Another implement was found near the same spot by Mr. Fooks,[2] but precise details are not given, and special interest therefore attaches to the first. It is described as dark, brownish-grey flint, mottled in places, with an edge worked all round, and equally convex on the two faces. Its shape and style proclaim its date, and one is faced with the discovery of a St. Acheul implement in position (and evidently unrolled) under 8 ft. of a gravel that might be classed as a plateau spread, and it laid down by the Thames must be of a remote antiquity, as the Heath reaches 130 ft. O.D. Mr. W. M. Newton's specimens from the same locality are classed by Messrs. Hinton and Kennard with those of the 100-ft. terrace,[3] and the

[1] *Stone Implements*, 2nd edn., fig. 456, p. 606.
[2] *Quart. Journ. Geol. Soc.*, xxxvi (1880), 547.
[3] *Proc. Geol. Assoc.*, xix, 92.

Dartford Heath gravel has since been recognized as belonging to the same terrace, which is seen at Swanscombe.[1] An explanation provisionally offered is that the gravel was, if not first laid down, at least disturbed in or soon after the St. Acheul period; but in spite of several finds of this kind in other districts, more investigation is necessary, and it is hoped to obtain more light this season on the relation between the plateau and terrace gravels in a tributary of the Thames.

[1] Messrs. Chandler and Leach, *Proc. Geol. Assoc.*, xxiii, 104; xxiv, 340.

THE CLEPHANE HORN

Published by the Society of Antiquaries of London, 1914

VI.—*The Clephane Horn.* *By* O. M. Dalton, *Esq., M.A., F.S.A.*

Read 14th May, 1914.

The horn, belonging to the Marquess of Northampton, is in some respects the most remarkable of its class, the class, that is, of the so-called oliphants, which, as far as our evidence goes, were made between the tenth and thirteenth centuries. The style and character of its ornament place it among the rarest and finest examples known; even the serious damage which it has suffered in the course of years cannot rob it of this distinction.

It has been described as the Clephane horn, because it was long preserved at Carslogie Castle, a seat of the Clephane family, near Cupar in Fife. Tradition says that it was there in mediæval times; and Sir Walter Scott, who reproduced it exactly a hundred years ago in his *Border Antiquities*[1], implies that it was used for sounding the alarm from the battlements when raiders were sighted in the district. No evidence appears forthcoming to show that the horn was ever a symbol of landed property,[2] like the horn of Ulph at York, though, as we shall see, its antiquity is at least as great. Unfortunately, there seem to be no early documents which make mention of it; nor is there any history to show who brought it into these islands, or at what time. This part of its story remains a blank. All that we can do, in default of direct evidence, is to determine its date and origin, as far as we can, by studying the designs carved upon its surface.

The main body of the horn,[3] which is covered with figure-subjects, is enclosed at each end by bands of ornament, with two plain spaces for metal

[1] *Border Antiquities of England and Scotland*, 1814, plate between pp. 208 and 209. The Clephane horn was shown at the Manchester Art Treasures Exhibition in 1857, and in the illustrated account of that Exhibition a drawing of it is given on p. 17, with description by Sir George Scharf; in 1862 it was also shown at the Special Exhibition of Works of Art at South Kensington (*Catalogue*, 1863, no. 212, p. 18). For the genealogy of Clephane see Sir R. Douglas, *Baronage of Scotland*, 1798, pp. 317–19, *Clephane of Carslogie*. The first member of the family there mentioned, is Manus de Clephane, who lived at the end of the twelfth century.

[2] Sir Walter Scott, as above, p. 206, asserts that the smaller barons held their lands and towers for the service of winding a horn on the approach of a hostile party. But he brings no evidence to show that Carslogie Castle was so held.

[3] The total length of the horn is 22½ in., and the diameter of the mouth 5 in. A large fragment 3¾ in. by 1¾ in. to 2 in. has been broken from the rim, and another fragment, some 4¼ in. by ⅝ in. to ¾ in. is lost on the inner curve. From this, a large crack runs to the mouthpiece.

mounts; the present silver bands are modern. At the narrower end, the ornament is of acanthus; the broader end has at the top a strip of similar acanthus; then comes, between two bands of pierced discs or circles, a zone of beasts and monsters; we then see two broad bands of an alternating scroll, probably derived from the vine. The creatures which remain intact, or nearly so, for the fracture of the horn is here at its broadest, are two winged sphinx-like monsters confronted, and separated by a formal tree, a lion, a boar, and a gryphon; two others, a quadruped seizing another (perhaps a second lion and a deer), are now very imperfect. Two additional formal trees make divisions between the various beasts. The figures on the body of the horn at first create the impression of being filled in at random, and of representing a confused crowd of men and horses, and other animals. But a closer scrutiny shows that all are really disposed in zones, each illustrating a different kind of action. At the top are four charioteers, probably those of the four circus factions, each driving a quadriga; they are divided into two pairs by structures probably representing the *metae*, or turning-points of the arena. The next zone represents the hunting of hares and does, with large dogs, on which the horsemen entirely rely, as they carry only whips: the horsemen ride in the middle (one is falling headlong), the dogs pursue the game above and below them. The third zone shows various encounters between pairs of men; the figures which are intact seem to be engaged, or about to engage, in a kind of wrestling. Two other men are much damaged by the fracture, and one is occupied in some way with a ring.

In the lowest zone are examples of tamed beasts with their trainers; a man leads a stag on a leash; another rides a horse with a hunting-leopard or cheetah sitting behind him. Beyond these figures are the remains of a group of three men, of whom only one is perfect, and unfortunately engaged in no action of a kind likely to explain his presence. Various empty spaces between the figures in these zones are filled with isolated leaves or branches, which have no connexion with the scenes represented. In this feature, as in the general appearance of the figures in the field, the horn recalls certain examples of Roman moulded pottery, especially the red *terra sigillata*.[1] Archaeological points suggested by the various figures thus summarily described will be further discussed below.

The comparison with Roman pottery may fitly introduce the question of date. It may be admitted that in its general aspect the horn has an antique appearance,

[1] Sir G. Scharf called attention, a good many years ago, to the general analogy between the treatment of subjects on the horn and that of Roman moulded ware (*Manchester Art Treasures Exhibition*, p. 17); the resemblances are certainly striking, as regards both the arena and hunting scenes, and the formal beasts and monsters round the mouth. (Cf., for example, H. B. Walters, *Cat. of Greek and Roman Lamps in the British Museum*, 1914, no. 1398, and *Cat. of Roman Pottery*, 1908, nos. M. 62, M. 364, M. 1463; E. Fölzer, *Römische Keramik in Trier*, 1913, pl. ii, 29, xx, 5, 7.)

EXTENDED DRAWING OF DESIGN ON THE CLEPHANE HORN.

suggesting at first sight a greater age than that of most known oliphants. The free and somewhat facile style of the figures is rather characteristic of works of art in the Graeco-Roman period; the rich brown tint of the ivory seems to confirm this suggestion of antiquity. But too much importance should not be attached to such resemblances, which perhaps impress us more than they should, because other analogies leading to different conclusions are not so generally familiar. The same kind of figures, the same subjects derived from the arena and the chase, in a similar fluent style, are equally to be found in Byzantine works of art dating from the period after iconoclasm, and they owe their similarity to the fact that Middle Byzantine art was largely derived from the antique, drawing continuously on early models, and often reproducing their manner with success. If it can be shown that the scenes on the horn find their nearest affinities in the Byzantine art of the tenth and the eleventh centuries, there will be no need to go beyond this period, to which most of the other oliphants are assigned; and the Clephane horn may be regarded as the product, not of a classical, but of a classicizing and imitative age. Attention may now be drawn to a few parallels which seem to render this conclusion probable.

Analogous hippodrome-subjects occur on three other horns of definitely medieval character, though only one of them approaches the Clephane example in richness of decoration. These are the well-known oliphant in the church of Jasz Berény in Hungary, and the two in the Cathedral at Prague.[1] On the first we find the main field occupied, as here, by a whole series of scenes from the arena, though acrobats, dancers and jugglers, and performers with trained beasts usurp the principal space, and chariots are not represented. The style of the figures appears to be less classical than that here seen, and no one has suggested for this oliphant an earlier date than the tenth century. On one of the Prague horns chariots appear, racing round the *meta*, and both offer points of resemblance in their ornament to the Marquess of Northampton's horn. In the sphere of pictorial art, we may compare a few representative miniatures and frescoes in which we recognize a kinship in style and subject to our reliefs. The illuminated manuscript of Oppian's *Cynegetica* in the Marciana at Venice is a good example of the secular art of the tenth century, and in this book there are many figures, both of men and beasts, clearly related to those under discussion.[2] In other manuscripts of the period, not all secular, there are representations of similar scenes from sporting life, the number of which, if collected,

[1] J. Hampel, *Alterthümer des frühen Mitellalters in Ungarn*, ii, pp. 888 ff., and iii, pl. 532–5 (the Jasz Bereny horn); ii, pp. 921–4 ff., and iii, pl. 536, 537 (the two Prague horns).

[2] Photographs of some of the miniatures are in the Collection des Hautes Études at the Sorbonne at Paris (cf. *Catalogue*, no. C. 510 ff.); of these two are reproduced in Dalton, *Byzantine Art and Archaeology* (figs. 158, 289).

would prove to be considerable. Allied in spirit to such scenes are the frescoes on the staircases leading to the galleries in the Cathedral of Sta. Sophia at Kieff, which are the work of a Byzantine painter in the eleventh century; they include charioteers waiting for the race, acrobats in the arena, and the hunting of beasts with dogs.[1] Byzantine art furnishes similar analogies for the beasts and monsters round the mouth of the horn, the types of which, though of oriental origin, passed into Hellenistic and Roman art, and were incorporated into the ornament of the East Roman Empire. It is true that here they are not inclosed in circles, as is usually the case on oliphants and textile fabrics, and that, in so far, they again rather recall the freer arrangement upon vessels of Roman moulded ware; but this is an exception which has small evidential value, for did we know most of the ivory horns produced in the tenth and eleventh centuries, instead of a mere residue of the number, it would probably be found that this was no unusual disposition. The 'sphinx' and gryphon, like the boar and other beasts, are features of Middle Byzantine ornament.[2]

We conclude, then, that the Clephane oliphant is not to be separated from other objects of the same kind; and that, though it may be ranked among the earlier of them, it has its place in the line of their development; it does not go back to the pre-iconoclastic period, much less to Roman times. Though at the first glance, in its wealth of figure-subjects and its mellow brown tone, it may impress us in much the same way as the consular diptychs of the fifth and sixth centuries, until we are tempted to ask whether it may not actually be contemporary with them, yet a closer inspection reveals weaknesses of drawing and proportion which suggest the copyist's work and a later epoch: we may especially note the feeble treatment of the wrestler's legs, and the unlifelike attitudes of the dogs. But there are more positive reasons for dissociating the horn from the ivory carvings of the Early Byzantine period, and grouping it with those produced after the revival of art under Basil the Macedonian. One or two of the horsemen appear undoubtedly to ride with stirrups,[3] which were

[1] N. Kondakoff, *The Frescoes on the stairs of the Cathedral of S. Sophia at Kieff*, in *Zapiski* of the Imp. Russian Arch. Soc., 1888, pp. 287 ff.; Arnaloff and Riedin, *The Cathedral of S. Sophia, Kieff*, St. Petersburg, 1859, and *Ancient Monuments of the art of Kieff: the Cathedral of S. Sophia*, Charkoff, 1899; Th. Schmidt, *The Cathedral of S. Sophia, Kieff*, Moscow, 1914 (all in Russian). The illustrations of the frescoes given in these publications are from the drawings by Solntseff published in an Album entitled *Drevnosti Russkiskago Gosudarstva: Kievskiy Sofiyskiy Sobor*. The frescoes did not escape restoration when the decoration of the Cathedral was renewed.

[2] The gryphon is too usual to require special reference. The sphinx, in the wider sense of a quadruped with human face, occurs on one of the Prague horns; and in Byzantine manuscripts and textiles (cf. *Homilies of Jacobus Monachus* in the Bibliothèque Nationale, Paris, MS. Grec. 1208, eleventh cent., ff. 66 and 194; O. von Falke, *Kunstgeschichte der Seidenweberei*, p. 117).

[3] The first European metal stirrups seem to be mentioned in the *Art of War* of the Emperor Maurice (582–602).

unknown to the Greeks and Romans, and do not appear, so far as I am aware, in Byzantine art before or during the reign of Justinian. The costume of the charioteers is not that of Roman or Early Byzantine times,[1] for the short tunic, apparently universal down to the sixth century, here gives place to a long garment which might almost be a reversion to the ancient Greek driver's dress. Again, the bands of ornament dividing the zones from each other are characteristic of the later, not of the earlier, period. The border of circular depressions or pierced discs occurs on one of the Prague horns. The alternating vine-scroll is also found in its essentials on one of these horns, though in a more compressed form[2]; it is allied in character to vine-scrolls of Middle Byzantine ornament, rather than to any motives of earlier times. The acanthus, in its careless execution, again recalls that of the Prague horns and other late works of art, not the boldly cut leafage either of the early diptychs or of the Carolingian ivory carvers who imitated them.

The use of the word Carolingian recalls the fact that when the horn was exhibited at South Kensington in 1862, Mr. A. W. Franks expressed the opinion that it was a Frankish copy of a Byzantine original, a view which has been subsequently held by others. Although the theory deserves careful consideration, it seems superfluous, because Byzantine parallels suffice to explain the facts without the hypothesis of western imitation. Apart from the acanthus, which is too widely distributed to count in evidence, the ornament is not West European, and this particular vine-scroll, as allied to Middle Byzantine ornament, is too late in type to have been copied by Carolingian artists. Moreover, the rather fluent style of the figures is not characteristic of the tense Carolingian manner. The hypothesis of a Frankish origin must therefore, I think, be abandoned. Another hypothesis, that the horn is western of a later date, in fact Romanesque, must also, I think, be dismissed. It may have been suggested by details in the architecture of the *meta*, and by the pearled borders of the charioteer's garments, but these features are not exclusively western, and certainly not sufficient to exclude a Byzantine origin; indeed, the general style seems even less Romanesque than Frankish. If there is imitation at all, it is more likely to be Byzantine reproduction of Byzantine work in another medium, than a copy made by any foreign artist. The introduction of landscape features on one of the Prague oliphants suggests a possible inspiration by an illuminated manuscript,[3]

[1] For charioteer's costume, cf. note, p. 220 below.

[2] A compressed version is also found on the diptych in the Barberini Library at Rome with the Ascension and Pentecost, originally published by Gori (*Thesaurus Vet. Dipt.*, iii, p. 40), but better reproduced in recent years by H. Graeven in his Italian series of photos of ivory carvings, and by E. Modigliani in *L'Arte*, ii, 1899, p. 289. The two scenes closely reproduce Byzantine models, but the style is evidently western.

[3] Hampel, as above, ii, p. 922.

and the same thing may have occurred in the present case. The unusual form of the *meta*,[1] perhaps even the charioteer's long robes, may be due to variations introduced by successive copying; but illuminators and ivory-carvers in the Middle Ages were not always architecturally exact, and neither the fantastic nor the inconsistent detail need surprise too much. There seems no reason to depart from the opinion expressed above, that the Clephane horn is medieval of the East, not of the West; and that it probably dates from the tenth, or, at latest, from the eleventh century. It is difficult to say with certainty where it was produced: the most probable locality would seem to be Constantinople itself. Dr. Hampel argued with much plausibility that the Jasz Berény horn was actually used in the Hippodrome, for giving signals or accompanying dances[2]; and it is reasonable to assume that an object ornamented with scenes connected with the arena should have seen the light in the only place where the tradition and practice of the ancient circus still survived. The argument would apply with even greater force to the Clephane horn, which appears to be of a purer style than the Hungarian example. It is just possible, however, especially if the carver worked from a manuscript, and not from what he saw around him, that the work may have been done in some other place where the influence of Byzantine art was supreme: we think of the frescoes at Kieff, and Kieff was not the only place beyond Constantinople where Greek artists were employed for barbaric princes whose subjects they trained to follow in their own steps.

Even though they may not be derived from the carver's own immediate observation, the subjects on the body of the horn are still important as illustrations of the sports and contests of the Byzantine circus at a comparatively late period. The Hippodrome at Constantinople was still flourishing, though with a diminished splendour, in the tenth and eleventh centuries; the descriptions of Constantine Porphyrogenitus tell us much of its ceremony and procedure, from which it is easy to infer that, though the greater glory of Justinian's time had departed, the circus continued to be a centre of national life.[3] The arena

[1] On the Prague horn with chariot-races, the correct form of the *meta* is shown (three spindle-shaped columns on a base), though this horn cannot be far removed in date from our example. It may be noted that variations in the form of the *meta* are recorded at an early date: a medallion of the Emperor Philip, perhaps of A.D. 248, shows them apparently replaced by edifices with gable roofs (Daremberg and Saglio, *Dict. des ant. grecques et romaines*, i. p. 1191, fig. 1522). On the lamp in the British Museum, already quoted, polygonal structures with domed roofs appear on the *spina*.

[2] A figure on the Jasz Berény horn blows what appears to be an oliphant to accompany the performance of acrobats. A panel from a Byzantine ivory casket in the British Museum shows a performer with a similar horn (*Cat. of Early Christian and Byz. Antiquities*, pl. xii, *b*).

[3] The Byzantine hippodrome balked large in the national life from the foundation of Constantinople, and from the fourth century its games and spectacles afforded subject for legislation (Th. Mommsen, *Theodosian. Libri XVI.*, vol. i, pt. ii, pp. 819 ff. = *Lib. XV.*, tit. 1). For the descriptions

seems to have been still in use in the latter part of the twelfth century, for Benjamin of Tudela mentions the exhibition of jugglers and trained beasts at that time.[1] But it never recovered from the sack of 1204 and the subsequent Latin interregnum.

We may now notice a few points of archaeological interest illustrated by the horn.

In the first zone the charioteers wear hemispherical helmets, which may be those of which we read as kept for use during the contest only, and then returned to the treasury of the faction.[2] It has been observed that they have long garments,[3] and we may further notice the manner in which the reins are passed over the head so as to encircle the body (the usual arrangement of the ancient arena), and the binding up of the horses' tails, as it is to be seen, for instance, in the manuscript of Oppian, already cited. The unusual form of the *meta* has been discussed above,[4] and the

of the Hippodrome in Byzantine literature, see A. Rambaud, *De byzantino hippodromo et circensibus factionibus*, Paris, 1870, and F. W. Unger, *Quellen der byzantinischen Kunstgeschichte* in R. Eitelberger von Edelberg's *Quellenschriften für Kunstgeschichte* etc. *des Mittelalters*, vol. xii, Vienna, 1878, pp. 286 ff. Much of our information is derived from the *De Caerimoniis* of Constantine Porphyrogenitus (see especially Bonn Edition, i, pp. 303 ff., ii, p. 336).

[1] A. Asher, *The Itinerary of Benjamin of Tudela*, 1840, i, p. 52. Benjamin says that at Christmas 'you may see in the Hippodrome surprising feats of jugglery. Lions, bears, leopards, and wild asses, as well as birds, that have been trained to fight each other, are also exhibited, and all this sport, the equal of which is to be met with nowhere, is carried on in the presence of the king and queen.' Similar entertainments were given on the occasion of marriages in the imperial family, or visits of foreign potentates (ii, p. 48).

[2] A. Rambaud, *De byzantino hippodromo*, p. 75. The helmet was of silver (*venerabile, κασσίδιον ἀργυροῦν σεμνόν*). On the monument of the famous charioteer of the sixth century, Porphyrius, at Constantinople, a boy is seen apparently holding such a helmet by the side of the standing charioteer (A. Mordtmann, *Mittheilungen des K. Deutschen Arch. Instituts, Athenische Abtheilung*, v, 1880, p. 299; Woodward and Wace, in W. S. George, *The Church of S. Eirene at Constantinople*, p. 79).

[3] It has been observed above that this is not the regulation tunic of Roman and Early Byzantine times (*αὐριγάριον* or *ἀρμελαύσιον*), which only reached to the knees, and is known to us from representations on many works of art, e.g. contorniate medals (Sabatier, *Description générale des médaillons contorniates*, pl. iii, iv, v, vii); the lamp in the British Museum (Walters, *Catalogue of Greek and Roman Lamps*, no. 1398); the monument of Porphyrius mentioned in note 2, above; the diptychs of the Consul Lampadius at Brescia (E. Molinier, *Ivoires*, p. 32) and of Basilius at Florence (Venturi, *Storia dell' arte italiana*, i, fig. 349), or the marble relief from Constantinople in the Kaiser Friedrich Museum at Berlin (O. Wulff, *Altchristliche und mittelalterliche Bildwerke*, etc., 1909, p. 16). Nor does it show the body-protection, apparently largely composed of leather thongs, which is clearly seen on some of these monuments. In addition to the above instances, we may note the representations of charioteers on silk textiles reproduced by J. Lessing in his Album, and by O. von Falke in his text to it entitled *Kunstgeschichte der Seidenweberei*, i, figs. 74 and 87 (textiles of the sixth and seventh centuries at Aix-la-Chapelle and Brussels), the similar fabric in the Louvre (Cahier and Martin, *Mélanges d'archéologie*, iv, p. 257 and pl. xx), the bronze statuette in the Louvre (Cahier and Martin, as above, p. 259 and pl. xxi), and the gilded glass, now lost (R. Garrucci, *Vetri ornati di figure in oro*, pl. xxxiv, fig. 3).

[4] While, as already noted, the oliphant at Prague gives the *meta* in its regular form of a base bearing three spindle-shaped columns, the costume of the charioteer seems to depart, as on our horn, from the common model.

presence of stirrups has also been noted as bearing upon the question of age. In the second zone, representing beast-hunts, we have noted that the horsemen carry no weapons, whereas on certain contorniate medals and in the Kieff frescoes they carry bows or spears.[1] The third and fourth zones are imperfect, owing to the fracture on the inner curve of the horn, an accident which is peculiarly unfortunate because the subjects in both are of especial interest. In the third row we have three pairs of men, one pair apparently about to wrestle, the other two actually engaged, the grip in both cases being upon the head or neck. Their tunics are gathered up at the sides to allow freer action of the legs in a fashion which gives the lower part of the garment a vandyked appearance.[2] Four of them wear cloaks, which would seem an unnecessary encumbrance,[3] and these, like the tunics of the two men without mantles, have in them small circular cavities, which look as if they might possibly have held diminutive gems or glass beads.[4] The action of the remaining pair is rendered uncertain by the fracture, which has destroyed half of each figure. One of the two stands with the left leg bent as if dancing, holding up a ring[5] in his left hand; the other,

[1] Though sprays of foliage are interspersed in this zone (cf. above, p. 214), whole trees are not introduced as in the Kieff frescoes, and on a contorniate medal, where they appear within the enceinte of the amphitheatre (Sabatier, as above, pl. ix, fig. 1). Such representations, unless entirely due to the fancy of the artist, almost suggest that trees and bushes were planted in the arena, on the occasion of beast-hunts, to give the scene a touch of realism. The figures of men and animals on the Kieff frescoes present a close analogy in style to those on the horn. Cf. Kondakoff, *Zapiski*, as above, p. 289.

[2] This method of fastening up a tunic for active exercise, though known in earlier times, is very frequently shown in Byzantine art of the middle period: it is perhaps the fashion *ἐπημμένοις τοῖς μηροῖς* —*alternantibus loris*— which Oppian describes (cf. H. Bordier, *Description des peintures et autres ornements contenus dans les mss. grecs de la Bibliothèque Nationale*, p. 272; Kondakoff, as above, p. 293). As the costume of hunters, soldiers, outdoor servants, etc., it is almost universal.

[3] In more ancient times, wrestlers and boxers were, as we should expect, entirely or almost nude (cf. Sabatier, as above, pl. vii, fig. 12, and viii, 10; Garrucci, as above, pl. xxxiv, figs. 6 and 7). Wrestlers are shown in the twelfth-century manuscript of the Homilies of Gregory of Nazianzus in the Bibliothèque Nationale (Bordier, as above, Index, s.v. *Lutteurs*).

[4] At first sight they suggest the body-armour worn by beast-fighters in the arena in earlier times, though this only covered the left shoulder and half the body, cf. the diptych in the Basilewsky Collection at St. Petersburg (A. Darcel and A. Basilewsky, *La Collection Basilewsky*, no. 45, and pl. xvii); this protection, however, does not seem to be required in the case of such contests as those here represented. It is more probable that the cavities represent discs of metal applied to the garments as a distinguishing mark of a corps or troop. Discs, in similar groups of five, ornament the breasts of three figures in the Kieff frescoes (Kondakoff, as above, p. 300, and fig. 4).

[5] This figure may be compared with that of a dancer on the ivory panel from a casket in the British Museum (*Catalogue of Early Christian and Byzantine Antiquities*, no. 301, pl. xx, *b*). Here the figure holds two wreaths, which seem to be part of the apparatus used in the dance. On other early monuments the wreath held by a victorious charioteer or athlete has the appearance of a simple ring (Sabatier, *Revue générale des mon. contorniates*, viii, 9 and 10). On a diptych of the Consul Areobindus, rings appear to be used as missiles against a bear (Molinier, *Ivoires*, p. 21, no. 10; Gori, *Thesaurus Vet. Dipt.*, i, p. 128).

whose only remaining arm hangs at his side, moves towards him. Each appears to wear a kind of breastplate in which the above-mentioned cavities recur (see note 4, p. 221). The lowest zone originally contained, under the above-mentioned dancers (?), a group of three men, of whom only one remains perfect, the fracture having destroyed the greater part of the other two. Of the central figure only the left hand and forearm are intact, apparently swinging a kind of club; the undamaged figure stands with unoccupied hands; the remains on the other side rather suggest that the corresponding figure stood in a similar attitude; we may compare one of the groups on the Jasz Berény horn, where club-like objects are used, perhaps in juggling.[1] Of the other two figures in this row, one, wearing a pointed cap and 'vandyked' tunic, leads a deer on a leash[2]; the other, who is mounted, holds high in his left hand a circular object resembling a shallow cup, and turns his head towards a leopard or cheetah seated behind him. This animal is represented seated in the same position behind horsemen in medieval Saracenic art, and, as we know from manuscripts, was employed by Byzantine sportsmen in the chase.[3] Leopard-trainers and their leopards were evidently a familiar spectacle at Constantinople; a regulation provided that when they entered or quitted the Palace, they must do so mounted, presumably with their leopards seated behind them, as here.[4] Thus the two last-mentioned figures may represent trainers of those tamed beasts of the arena to which Benjamin of Tudela alludes.[5]

In the foregoing pages some reason has been shown for the belief that the Clephane horn belongs to the province of Byzantine art, and that it was made perhaps as early as the tenth century, but certainly before the sack of Constantinople in 1204. If this is so, it may well have come into the west of Europe among the spoils of the Fourth Crusade.[6]

[1] Hampel, as above, ii, p. 899, fig. 26.

[2] We may compare the nude figure leading a dog on the casket in the British Museum, mentioned above.

[3] e.g. Gospels of tenth century in the Bibliothèque Nationale, Paris, f. 6 (H. Bordier, *Descr. des peintures et autres ornements, etc.*, p. 103). It will be remembered that a hunting leopard is led on a leash in Benozzo Gozzoli's frescoes in the chapel of the Riccardi Palace at Florence. It has been suggested that the object held up by the rider may be a bowl of blood, with which the leopard was rewarded after a capture.

[4] Codinus, *De officiis*, ch. xxii. The Greek words are: *Ἰστέον δὲ καὶ τοῦτο, ὡς οἱ Παρδόβαλλοι, ὁπηνίκα φέρουσι τοὺς πάρδους, ἱππόται εἰσέρχονται εἰς τὸ παλάτιον καὶ ἱππόται ὁμοίως ἐξέρχονται.*

[5] Cf. above, p. 220.

[6] On the general subject of oliphants the following papers in *Archaeologia* may be consulted: Gale, vol. i, 168; Pegge, vol. iii, 1; Ellis, vol. xvii, 311; Nicholls, vol. xxxix, 349.

VII. *Irish Brooches of Five Centuries.* By Reginald A. Smith, *Esq.*, *F.S.A.*

Read 18th June, 1914.

A number of ancient brooches on the penannular principle is to be seen in the British Museum and the National Museum of Antiquities at Edinburgh, as well as in the National Museum at Dublin, where most are naturally preserved, as the type is predominantly Irish. It is not surprising to find that the ends of the hoop are frequently joined, thus rendering the ordinary name in a strict sense inapplicable, but it will be convenient to include as penannular those, generally of the middle period, that have evidently been developed from the standard pattern but have a different arrangement of the pin owing to the fusion of the terminals. The penannular group of brooches includes specimens which, if considered apart, would hardly betray any common features; but the existence of many intermediate stages renders a logical and chronological sequence possible, and an attempt will be made to give some degree of precision in place of the unsupported guesses of the past.

The term 'penannular' is derived from the Latin to describe this type, as the hoop forms an incomplete ring, a space being left between the terminals for the passage of the pin, which has a loop at the head running on the hoop. The pin is passed through the fabric and the hoop then turned round under the pin to prevent the latter becoming detached. The mechanism has been described by the late Mr. Romilly Allen and others,[1] and is found in other parts of the world, as Algeria and the Tibetan border of India[2]; but a discussion of its distribution in space and time would here be irrelevant.

In the present paper comparatively few of the extant specimens will be utilized and fewer still described in any detail, as the majority have already been published, and the references given in the chronological list on p. 247 reduce the footnotes to a minimum. The scheme here formulated is based on what seem to be typical specimens, but further discoveries and experience can alone decide whether certain patterns are local varieties contemporary with others in the main line of descent. Handling a larger number in the principal collections might lead to some modification of the chronology proposed and would certainly add to one's knowledge of the technical processes and minute detail of the

[1] *Illustrated Archaeologist*, 1894, 162; *Reliquary and Illustrated Archaeologist*, x, 15.
[2] Mrs. Rivett Carnac illustrates several in *Journal of Indian Art*, July, 1913.

specimens. But what is more urgently needed is a key to the sequence, which may be found in the published material; and the mere collection of references on a subject that has been rather overlooked hitherto would have its advantages and perhaps lead to a more thorough investigation. In the text a chronological order has not been exclusively followed, as it is in some cases desirable to isolate a certain feature and to trace its evolution over a century or two apart from concomitant changes; but except for such digressions the treatment will follow what appear to be the main lines of development and degradation.

With a few notable exceptions, no clue to the date of published Irish brooches is given by associated finds, and recourse must be had to internal evidence. This may be due to negligence on the part of the finder—and such objects are generally found by accident—but there is generally an air of mystery about the source of any object that may rank as treasure-trove, and groups are apt to be split up by way of precaution. Much light is thrown on the sequence and affinities of the various forms by such finds as those of Rogart and Croy, but a comprehensive scheme is needed to include the vast majority of specimens which are left to tell their own tale. It is a fair field for the typological method that has been used with great effect by Prof. Montelius of Stockholm; and the results of its application in the present instance can be tested by comparison with specimens dated by associated objects, or with illuminated manuscripts dated on historical or palaeographical grounds.

A convenient starting-point for the Irish series is a brooch that betrays a close connexion with the penannular type of Roman times, but a few words are needed to show the non-Roman origin of a type that reached its highest development in Ireland, where the Roman civilization that transformed Britain never gained a footing. Many of the specimens included in the list on p. 225 date from the days of British independence, perhaps before the time of Julius; and they show that the form was already fixed and widely adopted by the ancient Britons.

A typical specimen is illustrated (fig. 1) from Dowkerbottom Cave, near Arncliffe, W. R. Yorks., a site that appears to date from a time when many caves in Derbyshire were occupied by natives, who robbed the more Romanized inhabitants and lived in comparative poverty and isolation, as at Harborough Cave, near Brassington, recently described in *Proceedings*, xxii, 129–145. The brooch consists of a hoop rounded in front and expanded at each end into an oblong with the angles marked off, a pattern that can be recognized in the framed lozenges of later centuries (pp. 236, 238). Next the terminals the hoop is ornamented with engraved transverse lines, probably a reminiscence of the coiled ends of the wire-terminals[1] on simpler and presumably earlier varieties

[1] An example is figured in the *Wroxeter Report*, 1912, pl. x, fig. 9, p. 29, the coils that form the actual knobs suggesting the writhen knobs frequently found in the Roman period.

of the type. The pin has a plain cylindrical head and is not much longer than the diameter of the hoop.

Earlier examples of the type are published abroad from two well-known sites of the La Tène period—Idria bei Baca, near Sta. Lucia, Carniola, and Stradonic, Bohemia; but the quest is more profitable nearer home, and before passing on to Irish developments it will be sufficient to mention one or two varieties of the penannular brooch that have less claim than fig. 1 to be considered an ancestor of the Irish series. The most common is that with writhen knobs, a form that also occurs in Dowkerbottom Cave as well as with a coin of Constantine at Elton, Derbyshire. Another variety has the wire bent back on itself to form the terminals, and in other cases spiral coils serve the

Fig. 1.—Penannular brooch, Dowkerbottom Cave, Yorks. (½)

Fig. 2. Brooch from Saxon grave, High Down, Sussex.

same purpose. Remarks on these forms and the penannular brooch in general may be found in *The Glastonbury Lake-village*, vol. i, 203, pl. xlii, where many examples are cited exclusive of the following list:—

Wookey Hole, near Wells, Som.: *Archaeologia*, lxii, 577; H. E. Balch, *Wookey Hole*, 92, and fig. 12 (p. 97).

Huntow, near Bridlington, E. R. Yorks.: T. Wright, *Essays on Archaeological Subjects*, vol. i, 24, with brooch of La Tène type.

West Coker, Som., on site of Roman villa: *Journ. Brit. Arch. Assoc.*, xviii, 394, fig. 2.

Caer Leb, Anglesey: *Archaeologia Cambrensis*, ser. 3, xii, 214.

Glenluce Sands, Wigtownshire, *Cat. Edinb. Mus.*, 89.

Island of Eigg, Inverness-shire, in a grave: *Proc. Soc. Antiq. Scot.*, xii, 593.

Barnton, near Edinburgh: Edinb. Mus. Antiq., FA 77.

Dunbel Rath, Co. Kilkenny: *Kilkenny Arch. Soc. Journ.*, N.S. iii, 307.

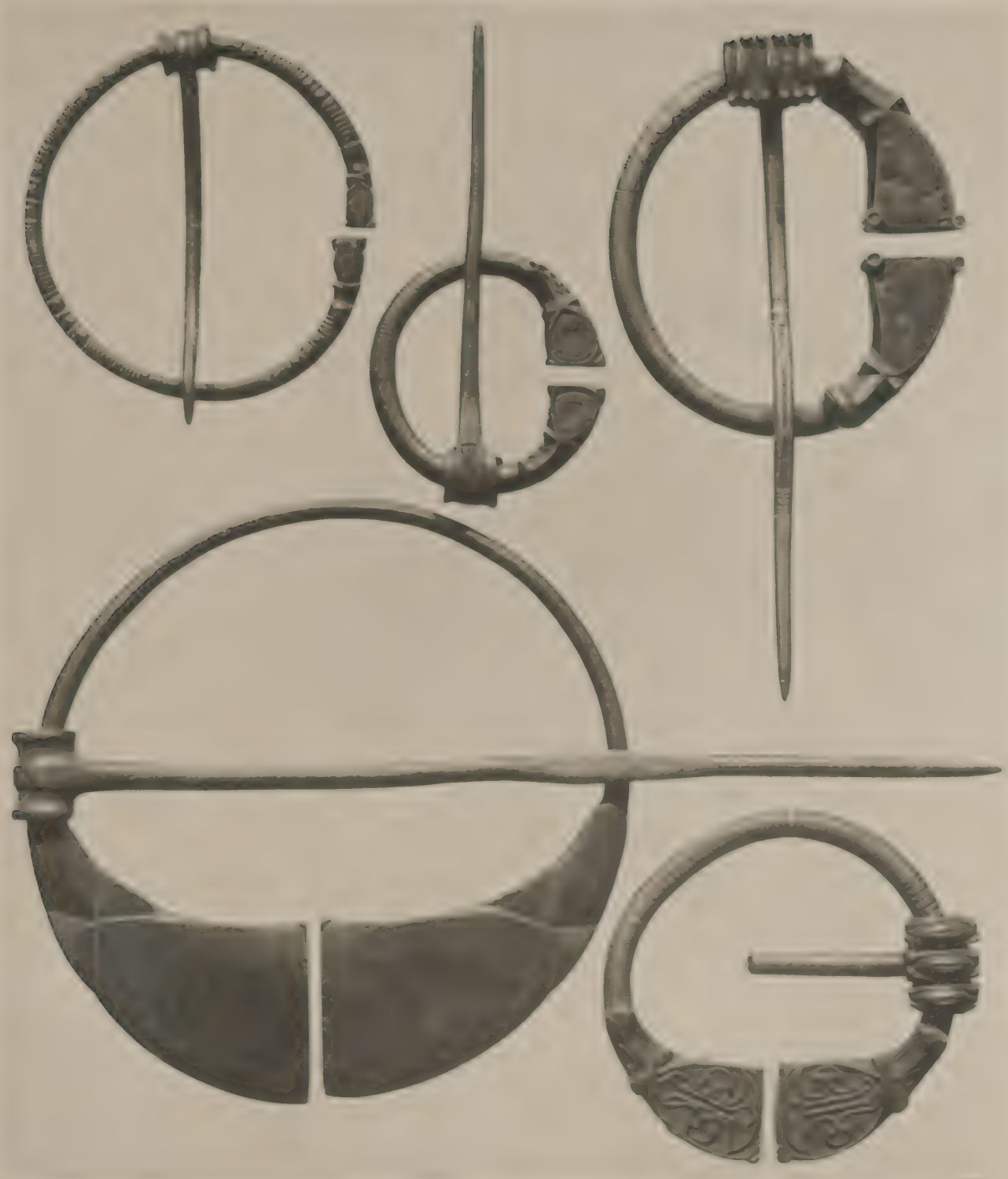
The Irish series now to be considered in detail was derived from what may be called the Welsh form (pl. XXV, no. 1), as the latter seems to have been affected by the Romanized Britons after the withdrawal of the legions early in the fifth century. The type has not only been found more than once in Wales, but the High Down specimen, for instance (fig. 2), may well have been looted from the Welsh in the neighbourhood of the Weald, whose butchery is recorded in the Anglo-Saxon Chronicle under the year 491. The Sussex specimen [1] has terminals that seem to mark a step towards the grotesque animal-heads seen on a specimen in the collection of the Royal Irish Academy (*R. I. A. Christian Guide*, 22, fig. 26) and was associated in a grave with bronze and iron buckles and two bronze brooches of ordinary type but new to the cemetery. There is nothing to give a more precise date than the sixth century, and the same may be said of a similar find at Bifrons, near Canterbury. Here a penannular brooch almost identical with the standard pattern but without its pin was found in a woman's grave (no. 9) with a bronze spoon perforated in the bowl, a crystal sphere, glass and amber beads, two square-headed brooches and one disc-brooch. There are several early features in the cemetery, which dates to a great extent from the late fifth and early sixth centuries; and this brooch is not the only Romano-British survival found. Another piece of evidence is the association of a small penannular (pin missing) with long Anglian brooches of the late fifth century at Bensford Bridge, near Rugby.[2] The terminals appear to be faceted cubes carelessly copied from the type shown in fig. 1.

The following list gives details of specimens constituting what may be called the Welsh type. They may all be assumed to be contemporary, apparently dating from the latter part of the fifth century:—

Porth Dafarch, Holyhead: *Arch. Journ.*, xxxiii, 132, in British Museum (pl. A, fig. 1).
Caerwent, Monmouthshire.
Ireland: British Museum.
Abingdon, Berks.: *Coll. Antiq.*, iii, pl. xxxvi, fig. 4, British Museum.
Bifrons, Canterbury: *Archaeologia Cantiana*, x, 303 (where it is called a bracelet).
Oldbury Camp, Wilts.: *Wilts. Arch. Mag.*, xxiii, 216.
Leicester: *V. C. H. Leics.*, i, 228, pl. i, fig. 4, Leicester Museum.
Pike Hall, Derbyshire: Bateman Collection in Sheffield Museum.
Dowalton Lough, Wigtownshire: Munro, *Lake-dwellings of Europe*, 401, fig. 130.
Longfaugh, Crichton, Midlothian: *Cat. Edinburgh Mus.*, 223, FT 3.

The prototype selected by Dr. Bernhard Salin, in his short discussion of the penannular brooch as it flourished in Ireland, has the terminals beaten out flat, and was found at Kempston, Beds. (British Museum). In the same series is

[1] *Archaeologia*, lv, 210, 213, pl. ix, fig. 5 (grave LXXIV).
[2] Akerman, *Pagan Saxondom*, pl. xviii, fig. 4; *V. C. H. Leics.*, i, 222.



EARLY IRISH PENANNULAR BROOCHES AND PROTOTYPE (FIG. 1) FROM ANGLESEY (*British Museum*)

Published by the Society of Antiquaries of London, 1914

another, of the same diameter (about 1 in.) but with the flattened ends of the wire loop folded back upon themselves. The cemetery has produced some of the earliest Teutonic remains in England.

The pages devoted to the subject in *Die altgermanische Thierornamentik* (pp. 330–335) are not meant to be exhaustive; and Ireland is described as practically an undiscovered country so far as archaeology is concerned, systematic excavation being in these days a prime necessity. That is true of many other places, but it is a curious fact that so many Irish brooches are extant without any adequate history. Dr. Salin regards the Irish brooch as a striking exemplification of the parallel development of form and ornament. That principle being established, he gives five illustrations of penannular brooches, but his chronological sequence does not coincide with that put forward in the present paper. His brief summary ends with the transformation of the penannular into an annular brooch by the fusion of the two expanded terminals, as in the Hunterston example; but as his chief business was with the ornamentation, many gaps are confessedly left in the evolution that it is now possible to fill, at least provisionally.

The brooches photographed natural size on pl. XXV have been selected to show the gradual evolution of this type during the sixth and seventh centuries, the dates here as elsewhere being more or less conjectural but calculated from certain fixed points. There is on the whole a gradual increase in size and weight, and a family likeness throughout, but the features that determine the sequence can be more readily felt than explained. The tendency is for the terminals to present a larger flat surface for decoration, and the modelling above them to become more pronounced, while at the same time the pin increases roughly from one diameter to two. The barrel-shaped pin-head undergoes modification and enrichment, but the three mouldings can generally be recognized in what may be called the first period of the Irish penannular. The first advance in decoration is shown in pl. XXV, nos. 2 and 3, where the terminals are enamelled in the *champlevé* manner (sunk enamel); and sometimes cross-sections of composite glass rods simulating mosaic are inlaid in the enamel, which is normally red. No. 4 is inserted here on account of its simple form, but it is of exceptional size for an early specimen, and the actual terminals were probably intended to remain quite plain. Something more like *cloisonné* or cell-work, but with the ground keyed for holding the enamel, is seen on no. 5, which is a good example of the application to brooches of the scroll-work found on Late Celtic bronzes. This and similar examples in the R. I. A. Collection[1] seem to herald such achievements of the Irish designer as the Book of Durrow, which is attributed with some reason to the latter part of the seventh century.

[1] e.g. *R. I. A. Christian Guide*, figs. 25, 27. [2] *Ibid.*, figs. 21, 22.

When it is remembered that St. Patrick died in 463 after thirty years of episcopal work, the possibility of the Christian cross appearing on an early form of Irish penannular brooch will be admitted, and a specimen in the R. I. A. Collection at Dublin seems to be so ornamented,[1] but the rarity of the cross among such a large number of brooches is very noticeable. The cross in the enamel setting of the hand-pin from Norrie's Law, Largo, co. Fife, may also be mentioned in this connexion: it dates probably from the sixth century.[2]

Fig. 3. Back of the Tara brooch (Bettystown, co. Meath).

The brooches represented (some without their pins) on plate XXVI, together with figs. 3–5, are fair samples of the best Irish period and cover about 150 years, according to the scheme here presented. Works of art like the Tara, Hunterston, and Londesborough brooches are necessarily scarce, but there are

[1] *Arch. Journ.*, xxx, 184 (probably seventh century).
[2] *Proceedings*, xx, 352; *Oscari Montelio*, 287, fig. 15; *Proc. Soc. Antiq. Scot.*, xviii, 244, fig. 10.

many humbler examples that are evidently related to the better known group. It is not sufficient to point out a common feature here and there, for such resemblances might be regarded as accidental; but there are groups of resemblances that materially assist classification and point to a wide dissemination of the typical forms in Ireland and Scotland. In England specimens are curiously rare, that from Bonsall, Derbyshire (fig. 5), being perhaps the most elaborate and no doubt of Irish workmanship. Progress in the arts must have been rapid in the century that produced the Lindisfarne Gospels and the Book of Kells, and there is a multiplicity of patterns contrasting with the staid uniformity of the previous series, but there is in most cases sufficient evidence of style to justify the position assigned them in the chronological list.

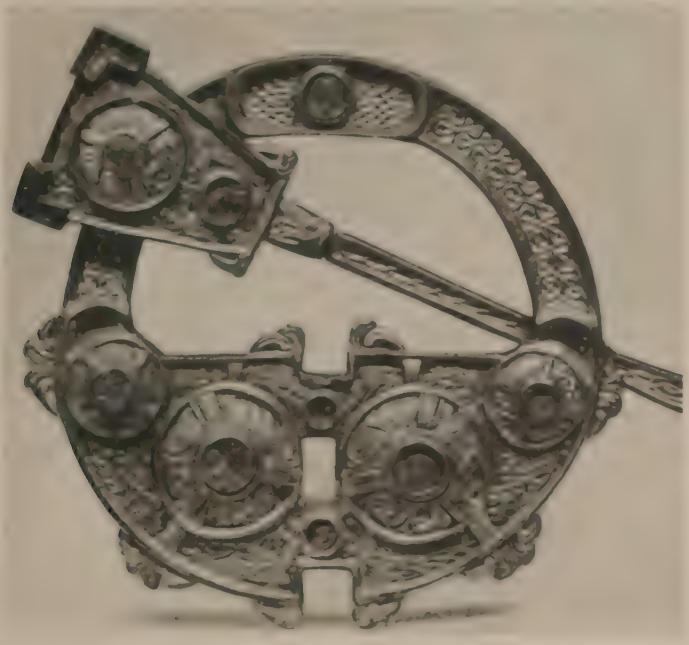


Fig. 4. Gilt brooch from Lord Londesborough's collection.

The terminals of no. 4 on plate XXVI are not actually joined, but the connecting limb is present as on most of the other brooches, whether large or small; and the length of the pin is in some cases more than double the diameter of the hoop. Silver is frequently used (e.g. pl. XXVI, nos. 1, 4, 5); and it will be noticed that only one on the plate (no. 3) has the hoop ornamented all over, the others being either plain or furnished with a panel opposite the junction of the terminals. The sockets were originally filled with enamel, glass-pastes or amber, garnets being rarely used though popular among the Anglo-Saxons.

The fine penannular brooch figured by Rygh (*Norske Oldsager*, fig. 607),[1] is typically Irish and must have been taken to Norway as loot by the Vikings. It was found at Snaasen, N. Trondhjem, with nothing precisely datable, but many ornaments in the same style have been found in association with objects dating, in Dr. Schetelig's opinion, from the late eighth and early ninth centuries. It has a three-lobed ornament on the terminals, which are joined in three places, above and below the centre by a circular setting; and the whole front of the hoop is decorated with interlacings in three panels. On the back of the terminals are two

Fig. 5. Gilt brooch, Bonsall, Derbyshire.

ornamented discs corresponding to those on the Londesborough brooch, but not purely geometrical; and the brooch has many points of resemblance to the Queen's brooch (pl. XXVII, fig. 2), both dating probably within a few years of 800. The pin of the Snaasen brooch is missing, but another is illustrated beside it, and belongs to the same type as that of the Queen's brooch, though the three lobes here merge into a ring and the ornaments dividing them appear as three jewelled settings.

[1] Reproduced in Dr. Anderson's *Scotland in Early Christian Times*, 2nd ser., 31, fig. 23.

An interesting specimen found at Canterbury (fig. 6) is also without its pin, and bears a strong family likeness to that illustrated by Rygh. It was suggested to this Society in 1903 that the brooch was a Scandinavian copy of an Irish original, the ornamentation of the hoop and the animal-heads below the junction of hoop and terminals being somewhat coarse; but whatever its place of manufacture, the most probable date for it is early ninth century.

Fig. 6. Gilt hoop of brooch, North Gate, Canterbury. (½)

Fig. 7. Penannular brooch, Dunshaughlin, co. Meath.

The Queen's brooch, of which a copy was presented to Queen Victoria, is said to have been found in co. Cavan, and the two small human heads that help to join the terminals occur not only on the Tara brooch (junction of chain with brooch) but also in the illumination of the Book of Kells; and Dr. Coffey[1] points out the similarity of the lobed decoration of the terminals to that of a brooch from Dunshaughlin, co. Meath (fig. 7), which has a triangular head to the pin, a hoop covered with interlacing (much like the Snaasen example), and two small animal-heads with gaping jaws just below the junction of the hoop and terminals. The animal-heads in the same position on the Queen's brooch are, however, seen from above, not from the side, and recall that below the triangular pin-head of the Tara brooch,[2] as well as that on the socket at the end of its chain. Another

[1] *R. I. A. Christian Guide*, fig. 30.

[2] Well seen in J. R. Allen's *Celtic Art*, p. 228 (lower figure), and p. 226 (upper figure).

example, grotesque but significant, is a penannular brooch from Roscommon[1] which in general resembles pl. XXVI, no. 7, the animal-heads replacing the large circular settings seen on the latter at the ends of the hoop. The animal's head seen from above is a common motive of early Teutonic art, as for instance on the feet of the Anglian 'long' brooches (mostly of the sixth century), and in a corresponding position on a well-known South European type of brooch, with oblong or radiated head-plate.

The development of the animal-head on Irish brooches is important chronologically, and on the whole the side view is certainly later than the top view. Both occur on the Tara brooch, and the side-view with gaping jaws on the edge of that brooch is curiously like those on the tenth-century specimens on pl. XXVIII; but it is doubtful whether there is any close connexion between them. The gaping jaws of the later series seem to have grown out of the curved rib at the junction of the hoop and terminals on brooches dating about 800, as pl. XXVI, no. 3, and the Rogart series (fig. 9); and the transition is well illustrated by the Croy group and pl. XXVI, no. 6, all dating from the early part of the ninth century. It is possible that when the stage represented by the smallest Croy brooch was reached, the craftsman saw a resemblance to the traditional animal-head of the Tara brooch[2] and hastened the development on those lines; and the presence of a spiral representing the eye behind the angle of the jaws in all the cases cited is certainly an argument in favour of continuity. The gaping jaws in a well-developed form appear on two brooches in the collection of the Royal Irish Academy, evidently derived from, and possibly a generation later than, the Queen's brooch.

A curious feature that may well have been structural in origin is the angle-piece seen, for example, at the upper corners of the keystone pin-head of the Londesborough (fig. 4) and Hunterston brooches. It is noticeable on the points of the terminals on one of the brooches from Mull,[3] on the Bonsall brooch (fig. 5), also in fig. 7, and pl. XXVI, no. 8. It is enriched with settings on the Mull brooch and may just be discerned in the same position on pl. XXVIII, no. 1. By the Viking period this feature had become merely ornamental, but it seems to have been confined to corners liable to be bent in use, and is conspicuously absent from the illuminated manuscripts where there was no practical use for them.

At this point some remarks are necessary on the changes witnessed in the form and decoration of the penannular brooch in Ireland during its middle and finest period. Apart from ring-headed pins that had the hoop pendent in front of the pin, the true penannular form was prevalent in the seventh century, to

[1] *Journ. Kilkenny Arch. Soc.*, 4th ser., iii, 158: it may be assigned to the late eighth century.
[2] J. R. Allen's *Celtic Art*, p. 226 (plate).
[3] Anderson, *Scotland in Early Christian Times*, 2nd ser., p. 14, fig. 9.

BROOCHES OF THE EIGHTH AND NINTH CENTURIES [

British Museum

Published by the Society of Antiquaries of London, 1914

which the latest specimens on pl. XXV are referred on various grounds. But the appearance of the Book of Durrow, probably in the latter part of that century, should prepare us for a considerable enrichment of the brooch and the structural changes consequent thereon; and three examples amply illustrate this point—the Tara, Hunterston, and Londesborough brooches. Hitherto the ornamentation of the hoop had been confined to engraved threads and occasional mouldings; but room was now found for more elaborate ornament on a flattened and widened hoop, and special prominence was given to a panel opposite the opening between the terminals. Reference to pl. XXV will show the reason for this, as the pin was worn across the hoop, roughly parallel to the long axis of the terminals, so long as the latter remained separate. The panel on the hoop would therefore be least exposed to friction and would further tend to keep the head of the pin in its place, as did also the raised animal-heads at either junction of the hoop and terminal; but with the elaboration of the terminals came a radical change in construction. The extra weight of the terminals and the general increase in size brought a greater strain on the comparatively slender hoop, and it became necessary to join the terminals, though their original appearance was indicated throughout by the scheme of decoration. The result was in effect an irregular annular brooch; and as the pin could no longer be slipped between the terminals, it had to be made detachable at the head by a bolt or similar device. The change appears to have been merely temporary, for with the decline of Irish art and the resumption of less decorative patterns, the terminals were again separated (pl. XXVIII). Brooches of the Viking period, though large and cumbersome, as a rule had terminals of thin silver, and the strain on the hoop was thereby reduced, while at the same time the hoop became thicker, a flat face being no longer provided for decoration of this part.

It is difficult to determine how much allowance must be made for local differences, but the ninth century seems to have brought a change in the style of brooch decoration. Such specimens as the Roscrea brooch (really a ring-headed pin) and the Dalriada brooch, which is entirely of gold, show on the edge or inner border a fair proportion of animal ornament, that links these with illuminated manuscripts of the best period. If the sequence here suggested is correct, the beginning of the ninth century is marked by specimens whose terminals together form a semicircle and are closely packed with almost pure interlacing. Such are the large Ardagh brooch (pl. XXVII, fig. 1) and one from Scotland (pl. XXVI, no. 8), which has a companion also in the British Museum. The design is meritorious but wanting in boldness and originality; hence one is disposed to consider that Irish art was already in decline. The bosses on the Ardagh brooch recall those below the handles of the chalice, but the latter is apparently the earlier production, and may be placed about the middle of the eighth

century. It is curious to note that the Book of Durrow, attributed by many good judges to the seventh century, contains much more pure interlacing than animal ornament, so that the elaborate trumpet-pattern and intertwined birds and beasts seem to be characteristic of the eighth century, which produced the Lindisfarne Gospels (Durham Book), the Book of Kells, the Golden Gospels of Stockholm, the Psalter of St. Augustine, St. Chad's Gospels, and many illuminations in the library of St. Gall.

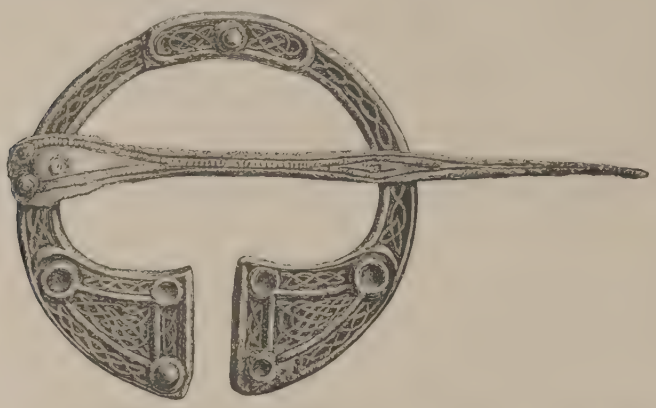


Fig. 8. Penannular brooch, links of Pierowall, Westray, Orkney.

A welcome confirmation of the date assigned to the Pierowall penannular (fig. 8) on stylistic grounds is afforded by the tortoise brooch found in association with it in a grave on the links. A special study of the tortoise brooch has been made by Professor Montelius,[1] who attributes one almost identical with the Orkney specimen to the beginning of the ninth century; and the penannular fits into the present series alongside pl. XXVI, no. 3, the pin and hoop being much alike in both, though the terminals are of different patterns. There is a brooch with connected terminals, but otherwise resembling that from Pierowall, in the R.I.A. Collection; and a development of it, not much later, is figured on pl. XXVI, no. 8, probably from Scotland. Pure interlacing is now the usual form of decoration, the trumpet pattern being abandoned and animal designs reduced to a minimum as on pl. XXVI, nos. 7, 8.

The two Scottish groups, here reproduced by permission kindly obtained by our Fellow Mr. Alexander Curle, are extremely valuable as landmarks in the evolution of the penannular brooch. A clue to the date of Croy is afforded by a coin of the Anglo-Saxon King Coenwulf, who reigned over Mercia from 796 to 822. Allowing a year or two for circulation, we may place these brooches about 820, and on typological grounds must assign a slightly earlier date to Rogart—say about 800. An analysis of the groups will show that these dates are in fair accordance with those deduced from the sequence of isolated specimens. The large Rogart brooch has, in the first place, the entire front of the hoop ornamented with pure interlacing in panels. The spirals and animal element seen, for example, on the Tara and Hunterston brooches, have dis-

[1] *Oversigt över den nordiska Forntidens perioder*, 31, fig. 42.

appeared, and the style agrees better with the Snaasen brooch, which is roughly dated by associated finds in Norway; but the work is somewhat inferior, and the birds' heads,[1] set in the lobes of the terminals and flanking the smaller disc at the centre of the hoop, seem to be an exaggeration of those seen on a similar but better example found near Perth, which may be a quarter of a century earlier. It is clear from these Scottish parallels that the large Rogart brooch cannot be regarded as an inferior example of the best period made locally, for there are some notable examples of the eighth century in that country, made probably by Scots on either side of St. George's Channel. A further indication

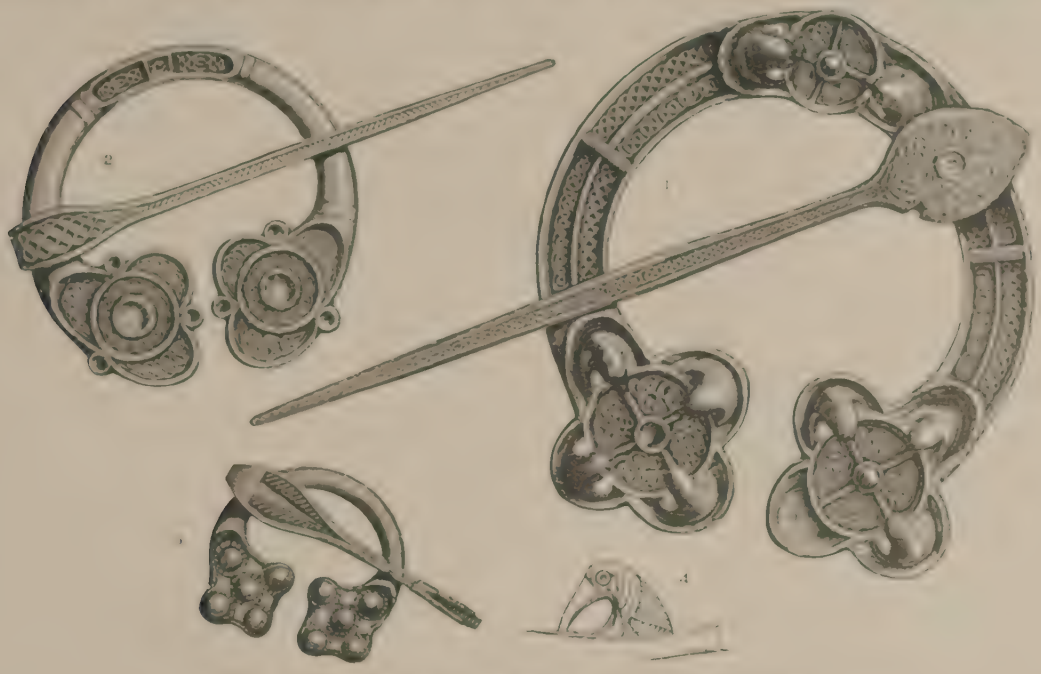


Fig. 9. Brooches found together at Rogart, Sutherlandshire.

of decline is the substitution of a pointed oval pin-head for the Keystone pattern common in the eighth century; and an interesting example that seems to fall between Rogart and Croy is the Galway brooch with three diminutive birds' heads round the disc and a rudimentary form of the gaping jaws at the junction with the hoop, which is quite plain.

The second Rogart brooch may be regarded as a simplification of the three-lobed terminal, and the restriction of the ornament on the hoop to a section opposite the opening is a common feature after the best period, though the hoop

[1] Three birds overlook the centre of the fused terminals on the finest brooch found in the Ardagh chalice (pl. xxvii, fig. 11. The Galway specimen is also mentioned, and Lord Dunraven refers to another found in the north of Scotland (*Arch. Journ.*, xxvi, 293).

Fig. 10. Brooch and fragments found together at Croy, Inverness-shire.

of earlier silver specimens is sometimes quite plain (pl. XXVI, nos. 1, 4). The pin-head may be regarded as a reduced copy of the larger Rogart specimen and appears again in a plainer form on what are apparently contemporary brooches (p. 246). The interlacing is very like the larger Rogart brooch, and the terminal-lobe next the hoop suggests the open jaws of the animal-head referred to elsewhere, the resemblance being still more striking in the complete hoop from Croy (fig. 10, top).

The small Rogart brooch has a pin evidently of the same family as the others, and squarish terminals ornamented each with five small bosses in rope-pattern collars. There is one very similar but with seven bosses on either terminal in the R. I. A. Collection; and another example[1] of this method of encircling bosses with twisted wires is included in the well-known Cuerdale hoard, deposited about 910 but containing fragments of earlier dates.

The complete silver hoop from Croy, Inverness-shire (a place, like Rogart, not far from the great bay on the north-east of Scotland) has just been referred to as suggesting the gaping jaws of an animal more strongly than the presumably earlier specimen of the same type from Rogart. So far as the evidence goes at present, this transformation of the curve at the junction of hoop and terminal took place early in the ninth century, and gave rise to some fantastic forms in the tenth; and though it cannot be considered infallible, a test of this kind is useful where more precise indications of date are wanting. It may serve, then, provisionally to distinguish brooches dating before and after the early years of the ninth century.

The Croy specimen in question retains a decorated panel on the hoop opposite the

[1] *Arch. Journ.*, iv, 191, fig. 95.

Fig. 1. Large Ardagh brooch—back and front

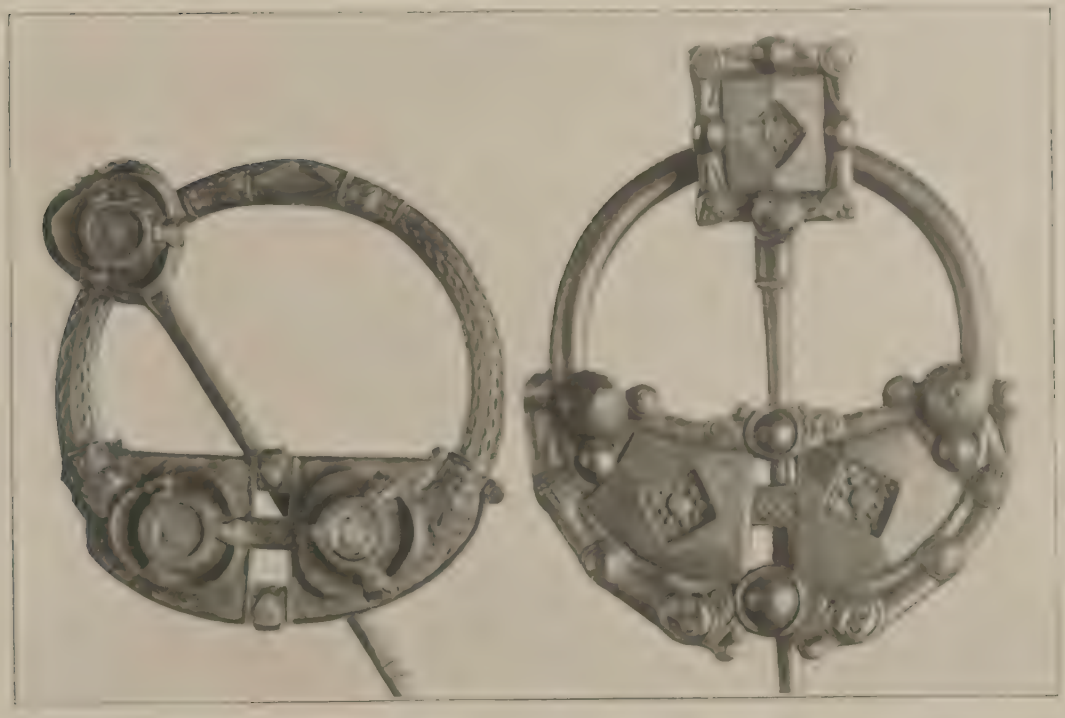


Fig. 2. The Queen's brooch, co. Cavan

Fig. 3. Killamery, co. Kilkenny

(All in National Museum, Dublin)

opening, like the second Rogart brooch, the rest of the hoop being plain: but this arrangement seems to be merely a simplification of the more elaborate eighth-century brooches, that generally have the surface decoration interrupted by a panel at this point, as on the Londesborough, Bonsall, and largest Rogart specimens. The simpler arrangement of the hoop is also seen on the second Rogart brooch and others on pl. XXVI, nos. 3, 6, 7, 8; and the disc terminals, which may be detected in the germ on pl. XXVI, no. 4, are seen associated with the gaping jaws on a specimen in the R. I. A. Collection. Still another example, with the jaws less open, is included in the Goldsborough hoard (pl. XXVIII, no. 2), this particular hoop (pin missing) being perhaps over half a century old at the date of the deposit (about 925). The animal fringe seems a little later than Salin's fig. 715.

The Croy fragment (fig. 10, middle), with tetrapsis terminal enclosing a square, again had a decorated panel in the middle of the hoop, and is perhaps allied to the lozenge series (as pl. XXVI, no. 2), but is closely akin to the Kilmainham brooch at Dublin, a richer and slightly earlier specimen set with garnets.

The third Croy specimen (fig. 10, below) is little more than a terminal, but is remarkable for its triangular cell-work setting (*cloisonné*), and looks like a degenerate copy of a somewhat common form (as Pierowall and Bonsall). It is interesting to notice the double lines of filigree joining the angles of the inlay to the border of the terminal, in a manner recalling the framed lozenge of pl. XXVI, no. 5.

The strip of plaited silver wire included in the Croy find had no particular bearing on the brooches, but is curiously like a fragment from the Cuerdale silver-hoard, which was deposited about 910 (*Arch. Journ.*, iv. 120, fig. 84), and may therefore be regarded as a pattern usual in the ninth century. Something of the same sort is seen in one of the panels on the foot-rim of the Ardagh chalice.

All the Rogart and Croy brooches were evidently penannular in the strict sense, but this fact can hardly be taken as evidence of early date, and is rather an indication of a falling-off in the size and splendour of the brooch, the joined terminals giving additional rigidity and security in use. Comparisons also indicate that neither hoard contained any but contemporary brooches, unlike the great find at Cuerdale.

The lozenge setting or motive can be traced through a series of brooches, but its history does not seem to be continuous. What appears to be an early example is one from Lagore crannog, consisting of a plain wire hoop with polygonal terminals, the front facet being a lozenge. This may be a contemporary variety of the Welsh type (pl. XXV, no. 11), and there are Roman and Irish[1]

[1] *R. I. A. Christian Guide*, p. 35 (W. 69 & 235), and fig. 47.

pins with similar heads; but the cube with bevelled angles appears as a pin-head in the Trewhiddle hoard (fig. 12) deposited about 875 in Cornwall, and the lozenge on brooch-terminals seems to be a favourite motive of the ninth century. A few examples may well be slightly earlier, as, for instance, the Killucan brooch (fig. 11) and another at Dublin, that only differs in the form of the openwork edging which, especially in the latter, is distinct from the animal fringes of later examples (as Killamery, pl. XXVII, fig. 3).

Fig. 11. Bronze brooch, Killucan, co. Westmeath.

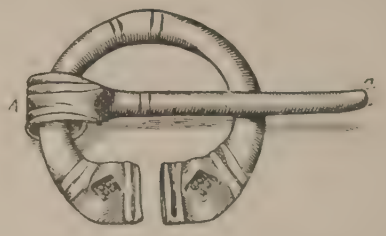


Fig. 12. Bronze brooch, Trewhiddle, St. Austell, Cornwall. (½)

What may be intended for an animal occurs as the outer fringe of the specimen from Derryullagh bog, co. Antrim, but the drawing may not do justice to it. The form of the terminal is not unlike the brooch next to be considered.

It is difficult to dissociate the two silver brooches (pl. XXVI, nos. 1 and 4) from another in the British Museum found near Tralee (pl. XXVI, no. 5), which has the terminals joined (other things being equal, a sign of later date), and the pin-head of the same form as the terminal, i.e. a square containing a lozenge, the latter bordered like the square and joined to it at the angles by short double lines. This pattern may for convenience be called the framed lozenge, and in this particular instance is finished off by a double line across the junction with the hoop, a simpler and presumably earlier form being the brooch from Ballynass Bay, co. Donegal. This double line is repeated at the free ends of a bronze brooch (fig. 12) found buried with a silver chalice and several bronze fragments engraved

in the Anglo-Saxon style at Trewhiddle, St. Austell, Cornwall. This find was fortunately dated by coins the latest of which was struck not earlier than 874, and the deposit may be safely attributed to the early years of Alfred's reign. The pin is imperfect and has an expanded head with fluting, reminiscent, perhaps, of the earlier cylinder-head (as pl. XXV). The lozenge is sunk as before but not framed, and has four raised dots arranged symmetrically within it. This identical pattern is seen on the casting from a mould-fragment found with many others at Mote of Mark (Rockcliffe, Dalbeattie, Kirkcudbrightshire), and just published by Mr. Alexander Curle,[1] who assigns the whole series to the ninth century. The brooch was penannular, about $\frac{5}{8}$ in. in diameter, with lozenge terminals and otherwise plain.

There is an outer fringe on a Roscommon brooch, which has the lozenge set in a frame at the end of the terminal, and a grotesque animal-head (p. 232) between it and the hoop; and a similar arrangement, modified and improved, is seen on a brooch from Tara, co. Meath, in the British Museum (pl. XXVI, no. 7), with a pin-head different from those already mentioned, and clearly the parent of that on the Killamery brooch (pl. XXVII, fig. 3).

The brooch illustrated on pl. XXVI, no. 2 does not easily fall into its place, and has unfortunately lost its pin, which might have given the required clue. It has a plain hoop ending in circular amber settings, the terminals being separated and consisting each of a lozenge with raised edges with an openwork fringe, that is little more than a ring, against the middle of each side of the lozenge. The type is related on the one hand to the Tralee brooch (pl. XXVI, no. 5) and on the other to the lobed example from Croy; while the plain hoop links it with nos. 1 and 4 on the same plate, and again with the Tralee brooch. Elaborate ornament on the hoops of small specimens would hardly be expected, but there are on the same plate two specimens no larger (nos. 3 and 6) with decorated hoops and two (at any rate) of the Croy group have panels opposite the opening, as well as the second from Rogart. Amber settings are found on several brooches dating about the eighth century, as pl. XXVI, no. 7, and ring-headed pins from Ireland in the R. I. A. Collection (*Christian Guide*, figs. 41, 42), and Dunipace, Stirlingshire.[2] The loops of pl. XXVI, no. 2, might be regarded as a simplification of the openwork fringe of the Killucan and allied brooches or as an application to the lozenge of the rings seen on disc-terminals, either isolated as pl. XXVI, no. 6, or arranged between larger lobes, as the second Rogart and square-ended Croy and Kilmainham brooches, and less clearly on pl. XXVI, no. 3. The Tipperary brooch has two settings in a corresponding position and four loops on the circumference of the discs that form part of the terminal decoration.

[1] *Proc. Soc. Antiq. Scot.*, xlviii, 144, figs. 13 and 14, no. 4, and p. 150.
[2] Anderson, *Scotland in Early Christian Times*, 2nd ser., 24, fig. 20.

The last-named specimen is well known also as the Kilkenny brooch, and seems to date from the middle of the ninth century. Compared with the refined products of the preceding century it is of barbaric design and clumsy execution. It closely resembles one of the brooches found with the Ardagh chalice (fig. 14, right), and both are directly descended from the Tipperary brooch. Instead of simple interlacing round the terminals, the Killamery brooch has grotesque animal forms with spirals or brambled bosses at the junction of the limbs with the trunk, but the terminals themselves, apart from the fringe, are on the Tipperary lines, and the keystone pin-head has given place to a rectangle retaining the sunk lozenge centre. Both the animal fringe and brambled bosses (differently arranged) occur on a silver specimen (fig. 13) from the Purnell Collection, now in the British Museum. It is probably fifty years earlier than the Killamery brooch, and cannot be far removed in date or origin from those figured on pl. XXVI, nos. 1 and 4.

Fig. 13. Silver brooch in British Museum (Purnell Collection). (1/1)

Attention should be drawn to the raised dots in the sunk lozenge of the head and terminal, and a few words are called for on the possible development of this form of ornament. It seems to be the unworthy representative of the filigree filling of such spaces seen on Irish brooches of the best period, and the transition is well shown by the Killamery brooch (pl. XXVII, fig. 3). In the lozenges will be noticed both dots and filigree, while on the hindquarters of the distorted animals forming the fringe of the terminals of this, and one of the Ardagh brooches (fig. 14, right), are bosses with spiral or brambled surfaces. The latter pattern is seen on a silver specimen in the national collection (*Proceedings*, xxi, 67), and in a debased form on a base-metal specimen from co. Westmeath (Londesborough collection). The lozenge so filled reappears on a brooch in Bergen Museum from that neighbourhood (*Proceedings*, xxi, 70); on one of the Cuerdale pieces (before 910, *Arch. Journ.*, iv, 125, fig. 62), and on the pin-head of a silver brooch without precise locality figured in *Proc. Soc. Antiq. Scot.*, xv, 80. The fully developed 'thistle' brooch has been already dealt with in *Proceedings*, xxi, 68, but is not an essentially Irish form, and so may be briefly treated on the present occasion.

The 'brambling' of rounded surfaces by means of deep cross-hatching seems to go back to Late Celtic times, but does not come to the fore in Irish brooches of the best period, unless (as suggested above) the filling of the lozenge terminals in some cases is a perpetuation of the tradition. The thistle brooch

SILVER BROOCHES AND FRAGMENTS OF THE VIKING PERIOD

(British Museum)

Published by the Society of Antiquaries of London, 1914

in Bergen Museum (*Proceedings*, xxi, 70) closely resembles that from Ballymoney, co. Antrim, in the Society's collection, and seems to mark an early stage in the development of the true 'thistle' or 'arbutus' brooch,[1] which flourished in the tenth century, and has been regarded as a Cumbrian type, as particularly large examples have been found in north-west England. The spherical terminals of these silver penannular brooches are occasionally roughed all over, but more often have the brambles omitted on that part which came in contact with the dress, the ornament being there engraved, generally in quadrants. Their occurrence with coins in various hoards points to the early part of the tenth century, and fragments both of the thistle and ordinary Viking penannulars were included in the Cuerdale silver-find, but the two types probably had a different origin. A good example of the thistle or arbutus brooch was associated with the Ardagh chalice, and is here illustrated (fig. 14, centre).

It is a plausible theory that the thistle brooch is due to oriental influences which operated in the Viking period in the Baltic. Cufic coins from beyond the Caspian have been found in England, and there is no doubt that large quantities of silver travelled along the trade-route between the Black Sea and the Baltic, the island of Gotland being the principal dépôt for this extensive traffic. A list in *Bohusläns Fornminnen*, vol. i, 362, mentions five thistle brooches from S. Sweden (the latest coins with two examples dating respectively from 950 and 936); four from Norway; three from Denmark (one fragment with coins of the late tenth century); and one from Lithuania.

The transition from what may be called the Scotic series (in view of the close relation between the Lowlands and the north of Ireland) to the Viking brooch is not clearly marked by extant examples; but a few suggestions may be hazarded. Oriental trade brought silver in quantity, and one characteristic of the Viking series is the free use of that metal without gilding. But the penannular brooch of that period seems to be based on the Irish form and might have developed on the same lines without foreign intervention. Thus the University brooch at Trinity College, Dublin, and one from the Scottish island of Coll, both apparently of the ninth century, have features in common with the typical Viking brooch (as pl. XXVIII, nos. 1 and 6), and the cylindrical head of the pin is variously ornamented. Pl. XXVIII, no. 1, bears a striking resemblance to pl. IV, fig. 2 (Ballyspellan) in the *R.I.A. Christian Guide*, and the bands linking up the five bosses on each terminal may be related to a design common on Scandinavian tortoise-brooches of the early tenth century.[2] These bosses of silver replace the amber and other settings of more luxurious times.

[1] So called from the resemblance of its terminals to the fruit of the arbutus or strawberry-tree (*Arbutus unedo*).

[2] Cf. the pair from Santon, Norfolk, in the British Museum (*V. C. H. Norfolk*, i, 347, fig. 12).

It should be borne in mind that hoards of scrap-metal like that found at Cuerdale, Lancs. in 1840, give a limiting date only in one direction; and though all previous to the date of deposit, the various fragments must be dated by internal evidence. To judge from the coins included, this silver treasure was buried about the year 910; but the condition of many fragments in it shows that they were manufactured some years previously. Reference has already been made to a brooch terminal closely akin to the complete hoop from Croy, nearly a century before the Cuerdale deposit, but there are also fragments of penannular brooches that would independently be assigned to the opening years of the tenth century. One is illustrated (pl. XXVIII, no. 4), and is evidently a degenerate copy of the type figured by Salin (*Thierornamentik*, fig. 715), the interval between them being about half a century. The Irish brooch is perfect, and shows that the double beaded ring of the fragment once surrounded a boss; and the curious openwork fringe is in the same way proved to be a caricature of the animal pattern that even on the Irish parallel can only be recognized as such by the initiated. Other Cuerdale brooch-fragments, which, it is interesting to know, must date before 910, are illustrated as follows in the original account: 62, already quoted as an example of partial brambling of the pin-head: 63, 64, globular terminals more or less brambled: 87, massive roughed-out terminal and part of hoop: 89, boss of a terminal: 91, the spring of a terminal with gaping jaws at the end of the hoop: 92, engraved ring cut into quadrants,[1] like pl. XXVIII, no. 3, both representing the earlier spiral above the gaping jaws as seen on the Virginia and Ballyspellan brooches, and others illustrated on pl. XXVIII, nos. 1, 2 and 6: 94, damaged terminal much like pl. XXVIII, no. 1; and 98, perhaps part of a terminal with animal heads viewed from above projecting from a fringe of lattice pattern.

The hoard found at Goldsborough, W. R. Yorks. in 1858, included pl. XXVIII, nos. 2 and 3, a thistle brooch, and other silver fragments illustrated in *J. C. H. Yorks.*, ii, 101, pl. I, fig. 5; also a number of Anglo-Saxon and Cufic coins, indicating 925 as the approximate date of the deposit. The thistle brooch is of medium size with a pin $7\frac{3}{4}$ in. long, altogether a close parallel to the Ardagh example and the so-called Arbutus brooch at Dublin, found in co. Kildare. The second Goldsborough fragment here illustrated shows the junction of hoop and terminal on a brooch typologically a little later than fig. 6 on the same plate, as the spiral behind the gaping jaws has here degenerated into a circle split into quadrants, as in the Cuerdale hoard.

The wonderful hoard found in 1868 close to the village of Ardagh, co.

[1] The ring enclosing a quatrefoil in the same position on a Scottish brooch (*Proc. Soc. Antiq. Scot.*, xv, 80, fig. 2) seems to mark a further stage of degradation. The brooch has one central boss, and a fringe of smaller studs on each terminal.

Limerick, is disappointing from the chronological standpoint; and the association of the various brooch-forms has been somewhat of a stumbling-block in the past, though the brooches were not all illustrated till 1909.[1] Products of the best Irish period cannot be studied apart from the Ardagh chalice, but general

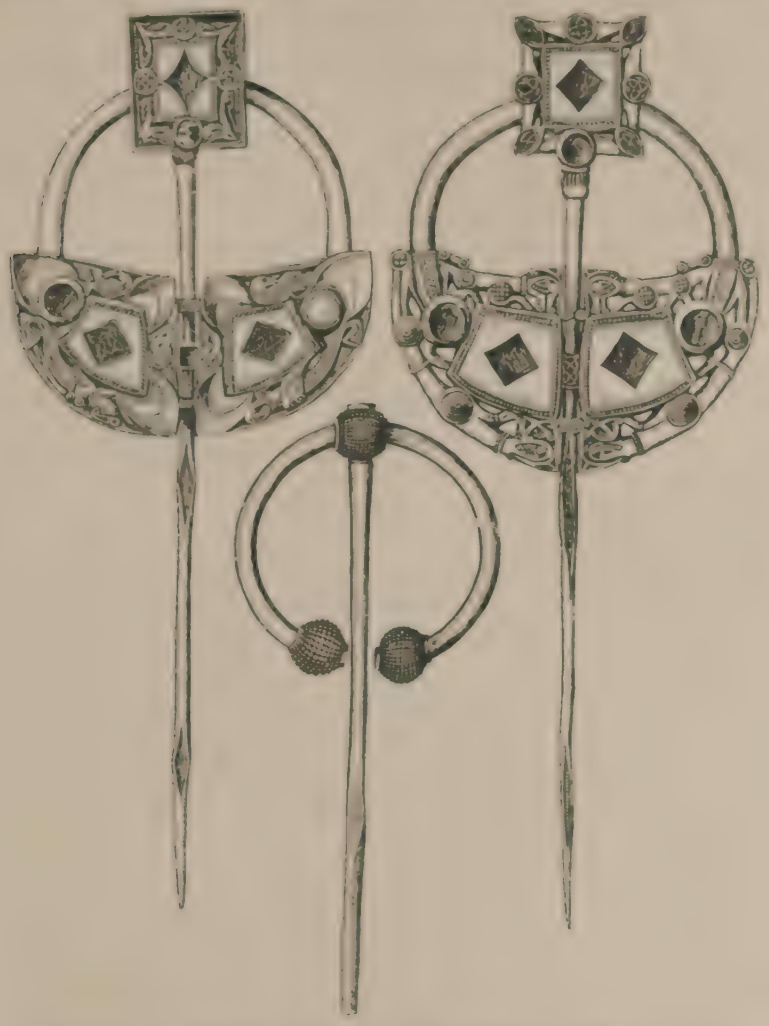


Fig. 14. Brooches found with the Ardagh chalice, co. Limerick. (½)

agreement as to its precise date has not been reached; and it is significant that no final choice between the alternatives there quoted is taken in the official *Guide* from which some of the illustrations are here reproduced. If the Tara

[1] *R.I.A. Christian Gaels*, 40, pls. v–vii, figs. 48, 49. Plate xxxi and figs. 3, 7, and 14 of the present paper are reproduced by permission of the Council of the Royal Irish Academy, through the good offices of our Fellow Mr. Armstrong, to whom I am also indebted for many details of Irish brooches.

brooch be placed early in the eighth century, it is difficult to assign the Ardagh chalice to any other, though the latter seems to be a later masterpiece. The exact date is not essential to the present argument as it is fairly evident that the brooches are not all contemporary. The treasure was no doubt hidden for safety either by the lawful owners or by despoilers, and in either case objects of various dates might well be included. One has only to remember the treasuries of cathedrals both at home and abroad, many of which contain items of widely different periods; and it is therefore advisable to consider the Ardagh brooches individually on their merits.

They are all of silver, partly gilt, and the finest is undoubtedly that illustrated on pl. XXVII, fig. 1. The terminals are joined, and the back view shows how the pin was usually released in such cases. As the stem could no longer pass between the terminals after the cloth was transfixed, the head and loop behind it were separated, sometimes by means of a bolt (as fig. 4), and sometimes by removing a rivet (as fig. 5). The latter method was certainly troublesome and was probably not adopted very often, the brooch being possibly worn like the ring-headed pins with the pendent hoop permanently in front. The present specimen has the front almost covered with pure interlacing beautifully executed, but the animal motive appears on the back-panels, and the three birds in relief on the front recall the heads on the largest Rogart brooch and other examples (p. 235). In the pin-head and many other respects it is a simplification of the Tara brooch, and probably belongs to the close of the eighth century, the trumpet pattern having been discarded in the interval. The upper brooches of fig. 14 are very much alike, and fit into the scheme just after the middle of the ninth century. The lozenge pattern is dealt with elsewhere, and the animal designs, though by different hands, are probably of the same period. The specimen on the right is curiously like the Killamery brooch (pl. XXVII, fig. 3) and must belong to the same school; and while the principal bosses of the latter remind one of those below the handles of the Ardagh chalice, the animal design at the back includes, in a rudimentary form, the gaping jaws prominent on brooches of the tenth century. The junction of hoop and terminal on the Ardagh specimen is like that on one figured by Salin (fig. 715), and is roughly contemporary.

The brooch on the left of fig. 14 has ear-like angles to the triangular terminal which seem to be loosely copied from the lobed design of such brooches as pl. XXVI, no. 3, which date early in the ninth century: hence these two Ardagh specimens are about contemporary with the first. The fourth ought to be somewhat later, as the thistle (or arbutus) pattern has more than once been found in association with coins deposited in the first half of the tenth century[1];

[1] *Proceedings*, xxi, 69.

even if it is placed about 900, it would still be half a century later than the other Ardagh brooches, and may indicate the approximate date of concealment. The Viking troubles would more than sufficiently account for such a deposit; and some of the best-known hoards in Britain date between 910 and 950.

In the scheme here presented, pl. XXVIII, no. 5 is the latest specimen, and some estimate of the rate of degeneration can be obtained by comparing this with what seems to be an earlier example in the same line of descent. It has already been suggested that Salin's fig. 715 and one of the Ardagh group (fig. 14, right) date from about the middle of the ninth century, and it is fairly easy to establish a connexion in style between the former and the largest on pl. XXVIII. By removing the animal fringe of the earlier specimen the likeness is intensified, and it is not an extravagant hypothesis that the corded border of the later brooch is in itself a simplification of the animal fringe, pl. XXVIII, no. 2 showing an intermediate stage. The smaller bosses (originally five) round the larger boss on either terminal are evidently arranged on the lines of pl. XXVIII, no. 1; and if no. 2 on the same plate was about seventy years old when the Cuerdale hoard was deposited, it is possible to account in some measure for the arrangement of the bosses on the adjoining specimen, for two at least represent the junction of the limbs with the trunk of the animal on either terminal. The gaping jaws commonly seen on the Viking type do not appear on pl. XXVIII, no. 5, but the head is seen from above once more, and seems to be modelled after Salin's fig. 715. If this succession is confirmed by further examples, it will be possible to link the Viking silver brooch with the complete hoop in the Croy find, which is over 150 years earlier than the latest here illustrated.

By way of retrospect a chronological list of brooches is presented with all diffidence, to supply details and references not given in the text, and to bring the scheme within manageable compass. Certain stages in the evolution are dated by external evidence, not so accurately as one would desire, but still near enough to control the conclusions drawn from form and decoration. Such a venture invites criticism, but even an imperfect classification is preferable to the vagueness of former books and papers on the subject. The marshalling of types is the first essential; and though the danger of selecting isolated points of resemblance is fully appreciated, a few words may be added in conclusion with regard to the form of pin-heads still attached to their penannular hoops, many of the brooches being imperfect in this respect.

A family likeness can easily be detected in the pins of brooches here assigned to the sixth and seventh centuries, and their derivation from that of the Welsh type is obvious. Variety begins with the eighth century and the most striking is the keystone pattern seen, for example, on the Tara brooch. This can be traced through a century (about 720-820), and examples can be cited

from Hunterston, Roscrea, Ardagh, and Tipperary. This pattern seems to be accompanied towards the close of its career by the oval pin-head seen on the large Rogart brooch and that with the birds' heads from Perth.

The keystone merges into the triangle, as on the Dunshaughlin brooch; and a fusion of this and the contemporary oval would produce the pear-shaped head figured by Rygh, the Queen's brooch (pl. XXVII, fig. 2), and one dating about 850 in the R. I. A. Collection. The Tipperary brooch and that on pl. XXVI, no. 7, mark the transition from the keystone to the oblong with lozenge centre, an early example of which is one from Mull. The Bonsall brooch (fig. 5) is a case in point, and another, dating about 800, is in the British Museum from Tara, co. Meath (pl. XXVI, no. 7). The pattern occurs again about the middle of the ninth century on the Killamery (pl. XXVII, fig. 3) and two of the Ardagh brooches (fig. 14).

Less pretentious brooches dating about 800 had the pin-head less prominent; club-shaped, as on the Dalriada and Pierowall brooches (fig. 8), and still simpler on the Skryne (pl. XXVI, no. 3) and smallest Rogart brooch (fig. 9); or squared at the top, as the middle Rogart and Kilmainham brooches. The latter variety led on to the cylindrical heads of the University, Salin's fig. 715, and Ballyspellan brooches, also that figured on pl. XXVIII, no. 1; and the barrel pin-head of the fifth to seventh centuries reappears again, sometimes even with its mouldings, in the Viking period (compare pl. XXV, no. 4, and pl. XXVIII, no. 5).

CHRONOLOGICAL LIST OF THE PRINCIPAL PENANNULAR BROOCHES AND ALLIED FORMS DATING ABOUT 500–1000 A. D.

Here figured	Approximate date	Locality and references
Pl. XXV, no. 1	450 500	Porth Dafarch, Holyhead, Anglesey. *Arch. Journ.*, xxxiii. 132.
		Lagore crannog, co. Meath, of iron. Wood-Martin, *Lake-dwellings of Ireland*, pl. XXIV, fig. 2 (poor drawing).
		Ireland: *R. I. A. Christian Guide*, fig. 26; Ridgeway, *Early Age of Greece*, vol. i, 591, fig. 149.
		Island of Mull, Scotland. J. Anderson, *Scotland in Early Christian Times*, 2nd ser., 15, fig. 10; *Proc. Soc. Antiq. Scot.*, xiii, 71, fig. 3.
		Norrie's Law, Largo, co. Fife: twisted loop with plain expanded terminals. J. Anderson, *Scotland in Early Christian Times*, 2nd ser., 37, fig. 24; *Proceedings*, xx, 352; *Cat. Arch. Inst. Edinburgh* (1856), p. 30; *Reliquary and Illustrated Archaeologist*, xi, 259, 262 (two brooches).
		King's co., with cruciform pattern. *Arch. Journ.*, xxx, 184, fig. 28.
	600	Togher, near Drogheda, Louth. Ridgeway, *Early Age of Greece*, vol. i, 591, fig. 150, much like *R. I. A. Christian Guide*, figs. 23, 24.
Pl. XXV, no. 2		Lough Ravel crannog, near Randalstown, co. Antrim: the terminals once enamelled.
Pl. XXV, no. 3		Co. Cavan.
Pl. XXV, no. 4		Co. Roscommon. *Arch. Journ.*, vii, 79; another similar in Wilde's *R. I. A. Cat.*, 564, fig. 468, no. 371 (probably from the Shannon).
Pl. XXV, no. 5		Co. Antrim.
Fig. 3		Bettystown, near Drogheda, co. Meath (called the TARA brooch). J. Anderson, *Scotland in Early Christian Times*, 2nd ser., 18, 19, figs. 12, 13; *R. I. A. Christian Guide*, plates I, II; J. R. Allen, *Celtic Art*, pp. 226-30 (details); M. Stokes, *Early Christian Art in Ireland*, revised edn., figs. 25, 26; *Illustrated Archaeologist*, 1894, p. 174.
	750	Hunterston, near Largs, Ayrshire. *Cat. Edinburgh Mus. Antiq.*, pp. 202-3; Allen and Anderson, *Early Christian Monuments of Scotland*, xcvii, fig. 286; J. Anderson, *Scotland in Early Christian Times*, 2nd ser., pp. 2-4; *Cat. Arch. Inst. Edinburgh* (1856), p. 31; Salin, *Thierornamentik*, fig. 716.
Fig. 4		Londesborough Collection brooch, probably from Ireland: amber bosses on front, and blue glass and medallions at the back.
		Near Clonmel, co. Tipperary. Ridgeway, *Early Age of Greece*, vol. i, 592, fig. 151.
		Derryullagh bog, co. Antrim. *Ulster Journal of Archaeology*, vi, 103; Wood-Martin, *Lake-dwellings of Ireland*, 118, fig. 141 (Lough Ravel).

Here figured	Approximate date	Locality and references
Pl. XXVI, no. 1	750	Co. Donegal, Bateman collection. Silver, once gilt: back of terminals ornamented.
Pl. XXVI, no. 4		Probably Ireland, Purnell collection. Silver, once gilt, with birds engraved on back of terminals.
		Snaasen, N. Trondhjem, Norway. Rygh, *Norske Oldsager*, fig. 697; J. Anderson, *Scotland in Early Christian Times*, 2nd ser., 31, fig. 23.
		Island of Mull, Scotland. Allen and Anderson, *Christian Monuments of Scotland*, xciv, fig. 25; J. Anderson, *Scotland in Early Christian Times*, 2nd ser., 12, fig. 8; *Proc. Soc. Antiq. Scot.*, xiii, 68, fig. 1.
		Achavrole, Dunbeath, Caithness. Allen and Anderson, *Early Christian Monuments of Scotland*, xciv, fig. 24; J. Anderson, *Scotland in Early Christian Times*, 2nd ser., 16, fig. 11; *Cat. Edinb. Mus. Antiq.*, p. 204.
Fig. 11		Killucan, co. Westmeath. *Proceedings*, xxi, 66, fig. 5.
Fig. 5		Bonsall, Derbyshire. Jewitt, *Grave-mounds and their contents*, fig. 457; Jewitt's *Reliquary*, iv. (1863) 65 (pin wrongly placed on pl. VIII), and several other brooches figured.
		Kilmainham, co. Dublin. *R. I. A. Christian Guide*, fig. 32.
		Roscrea, co. Tipperary. M. Stokes, *Early Christian Art in Ireland*, revised edn., fig. 29.
	780	Perth. Allen and Anderson, *Early Christian Monuments of Scotland*, xcvi, fig. 27; J. Anderson, *Scotland in Early Christian Times*, 2nd ser., 21, fig. 14; *Illustrated Archaeologist*, 1894, 172.
		Dalriada, co. Antrim, 3 miles above Coleraine: gold brooch weighing 2 oz. 6 dwt. *Ulster Journal of Archaeology*, iv, 1.
Pl. XXVII, fig. 1	800	Reerasta rath, near Ardagh, co. Limerick: brooch found with others inside the chalice. *R. I. A. Christian Guide*, pl. VII; M. Stokes, *Early Christian Art in Ireland*, revised edn., fig. 30.
		Ballynass Bay, co. Donegal. *Ulster Journal of Archaeology*, vi, 351.
		Co. Roscommon. *Journ. Kilkenny Arch. Soc.*, 4th ser., iii, 158
Pl. XXVI, no. 3	800	Skryne, co. Meath, from a tumulus. *Arch. Journ.*, ix, 200; xviii, 165.
		Cloonfinlough crannog, co. Roscommon: British Museum. Wood-Martin, *Lake-dwellings of Ireland*, pl. XXXV, fig. 2.
Pl. XXVI, no. 7		Tara, co. Meath: Bateman collection.
Fig. 9	800	Rogart, Sutherlandshire: three brooches found together. *Cat. Edinburgh Mus. Antiq.*, 200–1; Allen and Anderson, *Early Christian Monuments of Scotland*, xcv, fig. 26; J. Anderson, *Scotland in Early Christian Times*, 2nd ser., pp. 7–10; *Proc. Soc. Antiq. Scot.*, viii, 304 (Cadboll).
Fig. 7		Dunshaughlin crannog, co. Meath. *R. I. A. Christian Guide*, fig. 30; Wood-Martin, *Lake-dwellings of Ireland*, p. 24, pl. XXVI, where locality given is Lagore crannog.
Pl. XXVII, fig. 2		Co. Cavan (the Queen's brooch). *R. I. A. Christian Guide*, pl. III, fig. 1.
Fig. 13		Silver penannular with head of pin: British Museum. *Proceedings*, xxi, 67, fig. 6.

Here figured	Approximate date	Locality and references
		Co. Tipperary (*R. I. A.* photograph).
		Near Galway, set with amber. *Ulster Journal of Archaeology*, vi, 103, fig. 7; *Gentleman's Magazine*, Feb., 1854, 147.
Fig. 6		Canterbury (North Gate), Kent. *Proceedings*, xix, 299.
Fig. 10	820	Croy, Inverness-shire: silver brooch and two fragments. Allen and Anderson, *Early Christian Monuments of Scotland*, xciii, fig. 23; J. Anderson, *Scotland in Early Christian Times*, 2nd ser., 23, fig. 16; *Cat. Edinb. Mus. Ant.*, p. 204; *Illustrated Archaeologist*, 1894, p. 172.
Pl. XXVI, no. 2		Probably Ireland: two amber bosses.
Pl. XXVI, no. 6		Longhill, co. Antrim.
Fig. 8		Pierowall links, Westray, Orkney. J. Anderson, *Scotland in Early Christian Times*, 2nd ser., 29, fig. 22; *Proc. Soc. Antiq. Scot.*, xiv, 88, fig. 39.
Pl. XXVI, no. 8		Probably Scotland.
		Island of Mull, Scotland. J. Anderson, *Scotland in Early Christian Times*, 2nd ser., 14, fig. 9; *Proc. Soc. Antiq. Scot.*, xiii, 70, fig. 2.
		Near Perth. J. Anderson, *Scotland in Early Christian Times*, 2nd ser., 22, fig. 22.
		The UNIVERSITY brooch (at Trin. Coll., Dublin). Reproduction in Victoria and Albert Museum.
Pl. XXVIII, no. 2	850	Goldsborough, W. R. Yorks., 1858, from a hoard of silver. *V. C. H. Yorks.*, ii, 101, pl. I, fig. 5; *Proceedings*, xxi, 69.
Pl. XXVII, no. 3		Killamery, co. Kilkenny, inscribed on the back. *R. I. A. Christian Guide*, pl. III, fig. 2; *Journ. Kilkenny Arch. Soc.*, N. S., ii, (1859) 244 (with back view); M. Rosenberg, *Geschichte der Goldschmiedekunst: Einführung*, 121, figs. 139, 140.
		Ireland. Salin, *Thierornamentik*, fig. 715.
Fig. 12		Trewhiddle, St. Austell, Cornwall. *V. C. H. Cornwall*, i, 377; *Proceedings*, xx, 48; *Archaeologia*, ix, pl. VIII, fig. 14.
Pl. XXVI, no. 5		Near Tralee, co. Kerry, 1856; Londesborough collection. *Ulster Journal of Archaeology*, v, 246, fig. 8.
		Mote of Mark, Rockcliffe, Dalbeattie, Kircudbrightshire: cast from moulds illustrated in *Proc. Soc. Antiq. Scot.*, xlviii, 146, fig. 14, nos. 4, 8.
Fig. 14.		Reerasta rath, near ARDAGH, co. Limerick: brooches found with another inside the chalice. *R. I. A. Christian Guide*, fig. 49.
		Island of Coll, Scotland: bronze brooch, once gilt, with settings of green glass. *Proc. Soc. Antiq. Scot.*, xv, 80 (fig. 1), 153.
		Ballyspellan, co. Kilkenny. *R. I. A. Christian Guide*, pl. IV, fig. 2, and Ogam inscription on back (*ibid.*, fig. 33); Brash, *Ogam Monuments*, pl. XLI; Salin, *Thierornamentik*, fig. 714; *Illustrated Archaeologist*, 1894, 173.
Pl. XXVIII, no. 4	before 910	Cuerdale, Lancs., fragment from a hoard of silver. *Arch. Journ.*, iv, 189, fig. 88 (for other brooches see text, p. 242).
	920	Co. Kildare (the ARBUTUS brooch). *R. I. A. Christian Guide*, fig. 34; *Illustrated Archaeologist*, 1894, p. 171.
Pl. XXVIII, no. 1		Ireland, back of terminals ornamented: Londesborough collection. J. R. Allen, *Celtic Art*, p. 222.
Pl. XXVIII, no. 3	before 925	Goldsborough, W. R. Yorks., 1858, fragment from a hoard of silver. *V. C. H. Yorks.*, i, 101, pl. I, fig. 5.

Here figured	Approximate date.	Locality and references
Pl. XXVIII, no. 6	950	Near Omagh, co. Tyrone. *Arch. Journ.*, xxix, 276.
		Virginia, co. Cavan. *R.I.A. Christian Guide*, pl. IV, fig. 1; Salin, *Thierornamentik*, fig. 713; *Illustrated Archaeologist*, 1894, p. 172.
		Orton Scar, Westmorland. *Archaeologia*, xxxiv, 446, pl. XXXVIII; *Arch. Journ.*, ix, 90; *Reliquary and Archaeologist*, 1903, 203.
		Scotland, silver brooch with thistle-headed pin; *Proc. Soc. Antiq. Scot.*, xv, 80, fig. 2.
Pl. XXVIII, no. 5	1000	Ireland: engraved on back of terminals. The studs are silver, not amber as stated in *Miscellanea Graphica*, p. 8.

VIII.—*On some ancient Deeds and Seals belonging to Lord De L'Isle and Dudley.* *By* C. L. Kingsford, *Esq., M.A., F.S.A.*

Read 25th June, 1914.

Before proceeding to a description of the Deeds and Seals, it will be convenient to give a short account of the early history of the Sydney family and of the means by which the lands to which these deeds relate came into their possession. The original home of the Sydneys was a farm, which still bears their name, in the parish of Alfold, on the borders of Surrey and Sussex, about ten miles south of Guildford. The first member of the family of whom we have any knowledge is a John de Sydenie, who occurs as acquiring land on the south of Chiddingfold wood (a few miles west of Alfold) sometime in the reign of Edward I. He may be the John atte Sydney who occurs as witness to a deed in 1313.[1] This John was probably the father or grandfather of a John atte Sydenye, son of John and Isabella, who with Gunnilda his wife held lands in Surrey and Sussex, part of which had come to him through his mother. His home is described as La Sydenye, and one of the deeds in which he is mentioned was executed there: these deeds are dated between 1331 and 1345. Nearly eighty years later, in 1420, a Nicholas Sedenye of Alfold gave to his daughter Alice lands in Cranlegh called 'le Thondurslaghus', which came to him at the death of Gunnilda, his mother. Though the interval is a little long, one may conjecture that he was a son of the John atte Sydenye of 1331 to 1345, and younger brother of the first William Sedenye, who in 1393 acquired a tenement called 'le Rotlond' in Shalford, near Guildford, and ten years later a share in the manor of Loseley. In 1408 there is mention of William, and his son William, in connexion with Rudgwick, just over the Sussex border. This second William is probably the father of William Sydenye, the younger, who appears in 1427, for in the next year Alice, daughter of William Sydeneye, the elder, married Arnold, son of Thomas Brocas. In 1435 we meet with William Sydeney, the elder, of Cranlegh, and William Sydeney, his son, of Sussex, who in 1445 is styled William Sydeney of Kingsham, a house on the south side of Chichester. William Sydeney of Cranlegh died on October 8, 1449. On August 15, 1451, William Sydeney of Kingsham executed at Baynards a deed providing for the

[1] *Victoria County History of Surrey*, iii, 78.

descent of certain of his lands. He died about a year later, but certainly before October 1452. This William Sydney of Kingsham is the first person of any importance in the genealogy. Though the family had gradually acquired considerable estates in Surrey and Sussex, they were till about this time at the best but small country gentlemen. William Sydney of Cranlegh used a seal with a simple capital W.; his son was the first to use an armorial seal, showing the Sydney pheon, on the deed of August 15, 1451. As the heads of the Kingsham and Cranlegh family of Sydneys had been for fifty years named William, it is possible that the long-continued use of a seal with a capital W may have been the origin of the pheon.

William Sydney of Kingsham (*d.* 1452) was married three times. First, to Cicely, daughter of John Michelgrove, by whom he had a son, William of Stoke d'Abernon and Baynards, between Cranlegh and Rudgwick. Secondly, to Isabel St. John, by whom he had a son William, who was apparently born before 1435, and a daughter Alice. And thirdly, to Thomasyne, daughter of John Barrington, and widow of William Lundesford, by whom he had four sons, Edward, Lewis, Francis, and Nicholas; the first three seem to have died young; Nicholas, who was probably the second in age, was ancestor of the famous Sydneys. William Sydney of Stoke d'Abernon married Elizabeth, daughter of Sir Henry Norbury, also of Stoke d'Abernon, and died in 1462, leaving two daughters. His widow married Sir Thomas Uvedale, and dying in 1488 was buried near her father in the Greyfriars Church at London. With this William Sydney we are not further concerned. His father, William Sydney of Kingsham, in the deed of August 15, 1451, made provision that if his son William by Isabel St. John came to the age of twenty-one years, and the feoffees found him wise and sadly governed, they should make an estate to him and his heirs male in Kingsham and other lands; this was done accordingly on April 4, 1461. This second William Sydney of Kingsham succeeded his elder brother in his share of Loseley, and died before 1507, leaving a son Humphrey, whose son William sold Loseley to Christopher More in 1532. Under the deed of August 15, 1451, the manor of West Preston, with lands at Angmering, Kingston, and Lancing, and other lands at Up Waltham, Ertham, and Fishbourne, all in Sussex, were to go to Lewis, Edward, and Nicholas, the sons of William and Thomasyne; Lewis seems to have died before 1461, when the feoffees executed deeds to give effect to William's intention. Afterwards it would seem that Edward also died without issue, and Nicholas succeeded to the whole. Nicholas Sydney married Anne, daughter of Sir William Brandon and aunt of Charles Brandon, afterwards Duke of Suffolk. This marriage really made the fortunes of the later Sydneys. Nicholas's son William, who was born about 1482, probably owed his advancement at the Court of Henry VIII to the help of his cousin. He was

knighted for his services at Flodden in 1513, became a knight of the body to the king, and eventually in 1538 was made Chamberlain to the Prince of Wales. In 1540 he had a grant of the lands of Robertsbridge Abbey, and in 1552 Edward VI gave him in addition the manor of Penshurst. He seems to have sold West Preston and his original Sussex estates in 1516-17. He married in the latter year Anne, daughter of Sir Hugh Pagenham and widow of Thomas FitzWilliam, died in 1554 and was buried at Penshurst. Sir William's son Henry was born in 1529; he was brought up at Court, was gentleman of the privy chamber to Edward VI, and in 1551 married Mary, the eldest daughter of John Dudley, afterwards Duke of Northumberland. Henry Sydney was of course the celebrated Deputy of Ireland and father of the still more famous Sir Philip. As one of the coheirs of the two young dukes of Suffolk, who died in 1551, he acquired the lands of Tatteshall College in Lincolnshire.

It is to the deeds of Tatteshall and Robertsbridge that the collection of early documents now at Penshurst owes its chief antiquarian interest. The deeds of Penshurst itself are of much less importance, and the deeds relating to the Sussex and Surrey estates of the early Sydneys are of value only as supplying the chief material for a correct genealogy.[1]

A descent from a yeoman stock as old as the reign of Edward I seems honourable enough to us. But it did not so present itself in the reign of Elizabeth. Accordingly, Robert Cooke, whom Dr. Round has described as 'that great parent of pedigrees and rascally king-of-arms', and of whom his contemporary Dethick wrote that 'he was dissolute and prostituted his office in the vilest manner for money',[2] produced in 1580 an elaborate pedigree. What seems to be part of Cooke's original pedigree is still preserved in a small roll at Penshurst; the parchment is very brittle and much discoloured; the appearance of the roll rather suggests that it may have been treated to give it a false appearance of antiquity. Cooke traced the family back to a William de Sidne, knight, whom he represented as having been in the service of Henry II before he was king, and afterwards Chamberlain; no doubt as the proper anticipation of the historical Sir William Sydney, who was Chamberlain to Edward VI when Prince of Wales. There is no authentic evidence that any such person ever existed. Cooke, however, made him ancestor of a long line of descendants, most of whom are described as knights, from Sir Symon de Sidnei in the reign of John to a Sir William in the reign of Edward II.[3] According to Cooke, William Sydney of Cranlegh was fifth in descent from this Sir William, an

[1] The account given above is based on these deeds, supplemented by some references from the Loseley MSS., for which I am indebted to Mr. P. Woods.

[2] See *Peerage and Pedigree*, i, 102; ii, 80.

[3] Cooke's pedigree is printed in *Miscellanea Genealogica et Heraldica*, ii, 161.

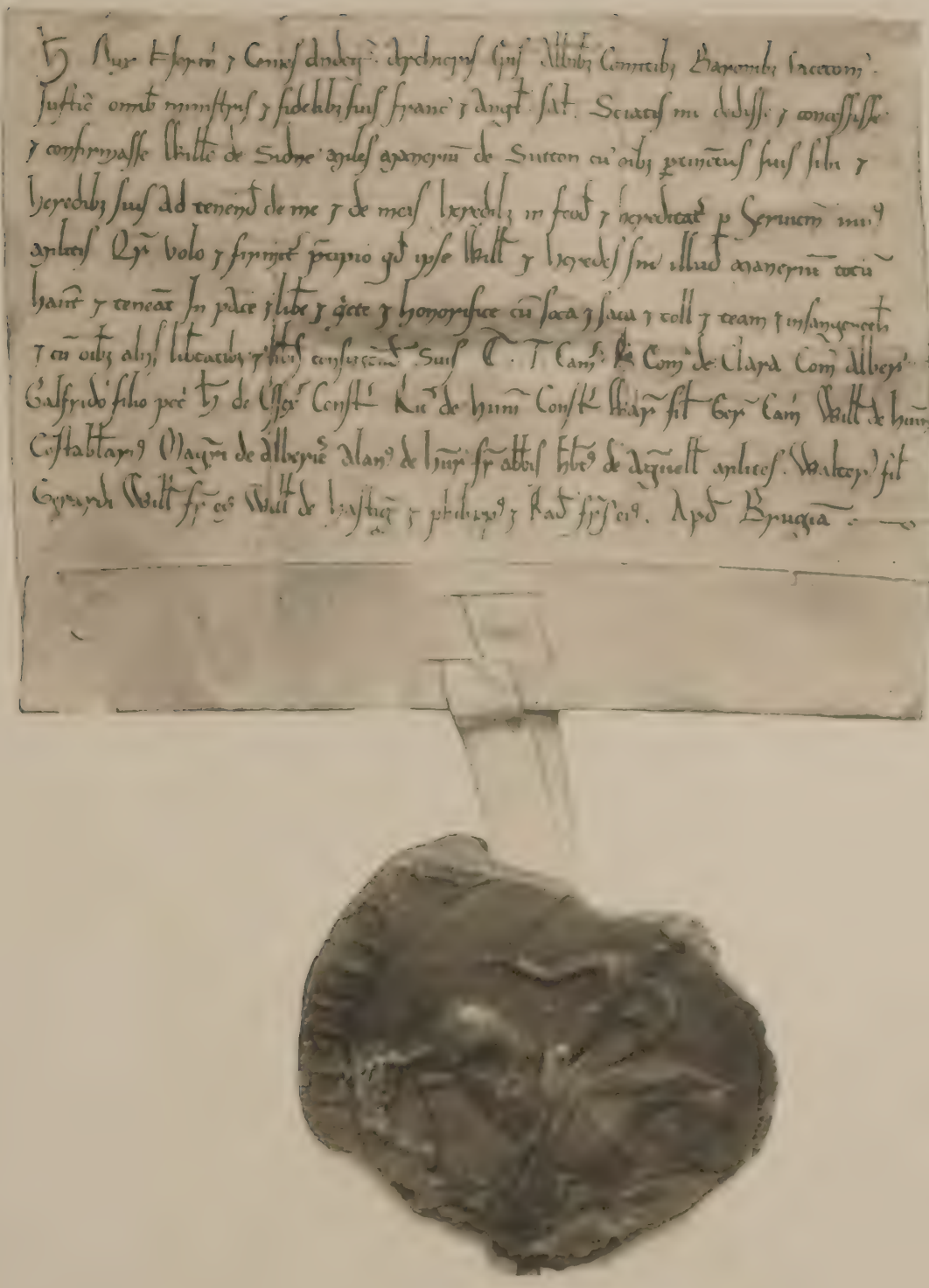
allegation which fits neither with the known facts nor with any likely chronology. Nor even then can Cooke tell the truth; he makes William Sydney of Cranlegh marry Cicely Michell, apparently in confusion with Cicely Michelgrove, the first wife of his son, and marries the second William Sydney of Kingsham to Elizabeth Norbury in confusion with his half-brother, William Sydney of Stoke d'Abernon. Over the descent from William Sydney and Thomasyne even Cooke could not go wrong. To all his fictitious Sydneys Cooke assigned arms, though as stated above the Sydney pheon first appeared in 1451. Arthur Collins, when compiling his *Lives of the Sydneys*,[1] perhaps suspected the truth of this genealogy; for after a brief reference to the supposed early Sydneys and their deeds and seals, he remarks that all our genealogists agree, and the records of the family prove, that Sir William Sydney was descended from them, and so proceeds to the authentic history of Sir Henry Sydney's father.

One must suppose that Cooke felt that his genealogy required support, and that he was therefore responsible for the appearance of four deeds, which are still preserved at Penshurst. The first of these purports to be a grant of the manor of Sutton 'Willelmo de Sidne, miles',[2] by Henry, Duke of Normandy and Count of Anjou, and is dated 'apud Brugiam', i.e. at Bridgnorth. I need not here discuss in detail the features which stamp this document as a forgery: the manifestly late date and inauthentic character of the writing; the mistakes of grammar, ablatives in opposition to nominatives; the dubious list of witnesses, with absurd descriptions like 'Constabularius Magistri de Alberie' and 'frater abbatis'. It is enough to point out that, since Henry became Count of Anjou on September 7, 1151, and Duke of Aquitaine in May 1152, the grant, if genuine, must have been made between these dates; but during this time Henry was never in England, still less at Bridgnorth. The siege of Bridgnorth took place in the summer of 1155, after Henry had become king.

Though the deed is a forgery, the fine seal, which is attached to it, is to all appearance genuine. In the British Museum there are two original specimens of the seal; but both are fragmentary, and the better of them is much inferior to the one at Penshurst. There is, however, a plaster cast from a fine though imperfect copy. A comparison with the Penshurst seal shows that the latter is either genuine or an extraordinarily good reproduction. Accepting the seal, we are confronted with the problem as to how it came to be attached to the forged deed. On the one hand, it is difficult to see how it can have been removed from a genuine deed and attached to the forgery without serious injury to its quality; but apart from the fracture of the margins the state of preservation is excellent,

[1] *Sydney Papers*, i, 76.

[2] See facsimile on pl. xxix.



ALLEGED CHARTER OF HENRY, DUKE OF NORMANDY TO WILLIAM DE SIDNI

Published by the Society of Antiquaries of Lond

the impression sharp, and the wax without any visible sign of maltreatment. On the other hand, the parchment has a good surface and hardly seems to be of such an age as the deed pretends. If the parchment is rejected, then in spite of the difficulty we must suppose that by some means the seal had been successfully detached from its original. If, however, it be held that the parchment is that to which the seal originally belonged, we must believe that the deed is a palimpsest; this latter theory is favoured by slight indications in some places, where the parchment is thinner, that an original deed may have been rubbed down. At first sight in one place—in the seventh line—there are marks which appear to be traces of older writing; but closer examination shows that these

Fig. 1. Cast of the seal of Henry II as Duke of Normandy.

marks are an impression made by folding before the ink was dry. However, in another place—ninth line—there are marks which it is not so easy to explain by this means, since they would require a different folding; to that extent this second set of marks would favour the palimpsest theory; but their evidence is not conclusive, and they may have been produced by similar means to the first. The difficulty of the deed would be met if it could be supposed that the forgery was written on a piece of parchment cut off from a genuine original with the seal intact; it is not, however, probable that on a deed of the supposed date there would have been a blank piece of parchment of sufficient size. An alternative solution is that the seal itself is a forgery made from a cast; this would remove all difficulties, and the surface of the seal is in the opinion of some good judges not altogether above suspicion. That the seal itself should have been

forged does not seem to be impossible, though its excellence indicates a degree of skill in the workman, which the person who forged the deed did not display in a matter which required more than manual dexterity. As a final point against the authenticity of the deed, attention should be directed to the intricate and quite unusual manner in which the parchment tag is inserted in the deed.

It is not necessary to discuss in detail the other three deeds. The writing of all three is obviously forged, and, as it would appear, by the same hand as the first. Two of the deeds have apparently genuine seals. The parchment of all three is inferior in surface to that of the first, and to this extent is more consistent with the theory that they are palimpsests. The two earliest profess to be charters of William de Sidne, the Chamberlain. The last professes to be a charter of his son Simon, dated February 23, 1208; it refers to the Abbot of Lewis (*sic*), which at once stamps it as a late forgery, since Lewes, as a Cluniac house, was of course under a prior. The purpose of the deed is to introduce William Dalamar as brother of Simon's wife. Not having a seal of their own, Simon and Beatrix use the seal of Dalamar: the seal, which has no inscription, seems to be genuine; it is a paste seal which has split in two halves, in this case it is therefore plausible to suggest that the seal was originally split by the Elizabethan forger to introduce the parchment tag. It is curious that in this deed Simon's wife is called Beatrix, whilst in the genealogy she is called Margaret. Similarly, one of the deeds refers to William de Sidne's wife Lucy, who does not appear in the genealogy at all. The variation is inexplicable, whether Cooke was responsible for both the deeds and the genealogy or not.

I will now give a brief account of the genuine deeds. Those of Penshurst itself are of value for the history of the house, but are otherwise of interest only for the presence of some good armorial seals. Penshurst was acquired by John de Pulteney, the mayor of London, who is commemorated at St. Lawrence Pountney, in September 1339, from Sir Philip de Columbariis; John de Pulteney died in 1349.[1] His widow, Margaret, married Sir Nicholas de Loveyn. The earliest deed is one by which her son William de Pulteney, in November 1356, gave his mother and step-father a re-lease for their administration of the estate. The arms shown on the shield, a fess dancetty, in chief three leopards' faces, had been used by his father. This deed has a curious history; according to a note attached to it, it was purchased quite recently, nevertheless it is duly entered in an Elizabethan calendar of the Penshurst muniments, from which it must in the meantime have strayed away. William de Pulteney died in 1367 without issue, and Penshurst reverted to his mother. Sir Nicholas de Loveyn was certainly in possession in 1370. At his death it passed to his daughter by Margaret de

[1] *Cal. Close Rolls*, Edward III, v, 335.

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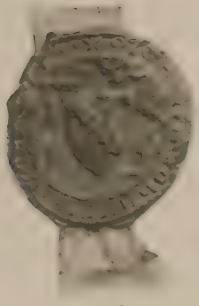

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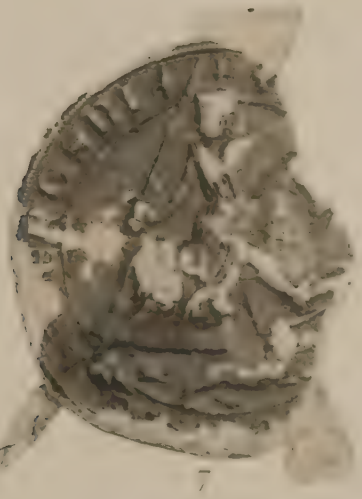

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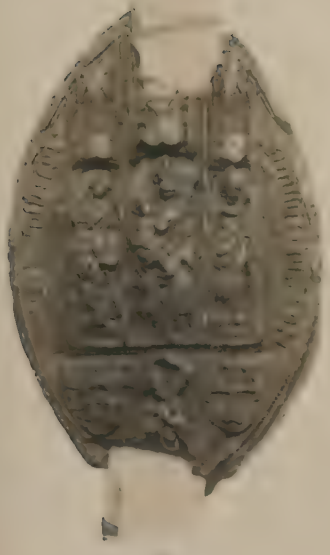

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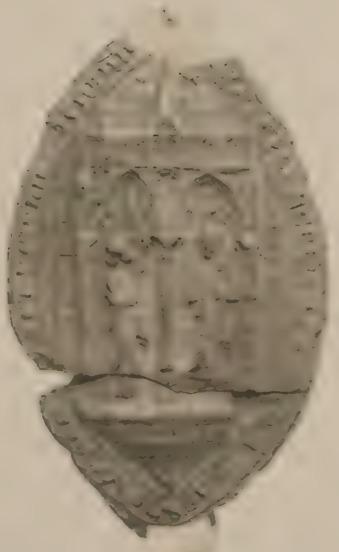

10

PENSHURST SEALS (1-6) TATTESHALL SEALS (7-10)

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Pulteney, who married (1) Richard Chamberlain (*d.* 1360) of Cotes in Northamptonshire, by whom she had two sons, John and Richard. Margaret de Loveyn married (2) Sir Philip Seyntclere, who died on May 14, 1408, leaving also two sons, John and Thomas. Margaret herself died in 1410, when all her sons were under age. By some means during their minority John, Duke of Bedford became possessed of the manor of Penshurst, which he held at his death on Sept. 14, 1435.[1] On June 18, 1438, Penshurst was granted to Humphrey, Duke of Gloucester, and after his death, on Feb. 28, 1447, to Humphrey Stafford, Duke of Buckingham,[2] whose great-grandson entertained Henry VIII there in August 1519. The Chamberlains had, however, retained some lands at Penshurst, and Edward, Duke of Buckingham had promised their then representative, Sir Edward Chamberlain, to have his claim investigated and to allow him some recompense.[3] By Buckingham's attainder in 1521 Penshurst fell to the Crown, and was a royal manor till the grant to Sir William Sydney in 1552.

The Tatteshall deeds relate chiefly to the College and Almshouse founded in 1443 by Ralph, Lord Cromwell, the builder of the famous Castle, but include some deeds of earlier date. Two of the most interesting seals of these latter are those of Walter Bek (*c.* 1210) and Maud de Cromwell, grandmother of Lord Cromwell and heiress of the ancient owners.

Of much more varied interest are the seals attached to the deeds of Robertsbridge Abbey. The collection is known to antiquaries by means of a calendar which was privately printed forty years ago.[4] Some use has also been made of the deeds by other researchers, and a small number were exhibited at the Society of Antiquaries in 1871.[5] The calendar, however, omitted a very large number of deeds, including some of the most ancient and interesting. In all there are upwards of 600 deeds, instead of about 400 as given in the calendar. Out of this total more than two-thirds belong to the twelfth and thirteenth centuries. Both at Robertsbridge and at Penshurst the deeds were carefully preserved, and the majority of the seals are in fine condition. Besides many private seals of persons of rank, and of humbler condition, together with a number of ecclesiastical seals, there are no less than fifteen specimens of Great Seals, mostly of the reigns of Edward II and Edward III, but including one of Richard I and a rare Exchequer seal of the time of Edward III. The Great Seal of Richard I is attached to the Confirmation Charter granted to the Abbey

[1] *Cal. Inq. post mortem*, iii, 200, 320, 327, iv, 1, 170; and documents at Penshurst.
[2] *Cal. Pat. Rolls*, Henry VI, iii, 168, v, 45.
[3] *Letters and Papers, Henry VIII*, iii, 469.
[4] Edited by H. Pinfold, 1873.
[5] *Sussex Archaeological Collections*, viii, 141–76.
[6] *Archaeologia*, xlv, 427.

in 1198, and is a fine specimen, nearly perfect. The Exchequer seal is attached to a deed dated 1360; it is only a fragment. Obverse: the shield and part of the border, on either side of the shield a castle. Reverse: part of the horse, with the rider's head and shield. The castles indicate that this seal was made in the reign of Edward II and continued in use under his successor.

There are also some other royal seals, including one of Edward I before he became king, and used by his lieutenants for Gascony on a deed dated at London, July 26, 1271. A fragment only: the shield showing the three leopards and label is perfect, on the right of the shield is a small cross. Only the first three and last two letters of the inscription are preserved: EDW . . . . . ES.

Robertsbridge Abbey was founded in 1176 by Alvred de St. Martin, who had married Alice, widow of John, Count of Eu. The most ancient deeds are of earlier date than the foundation, and relate to the acquisition by the founder from his brother Geoffrey de St. Martin in 1160 of the lands with which he afterwards endowed the Abbey. To one of these deeds is attached the seal of Count John. The Counts of Eu, who held lands in the Rape of Hastings, were the chief patrons of the Abbey during the first sixty years of its existence. Their seals, equestrian and armorial, form an interesting series. The early seals also include many seals of knights about the end of the twelfth and beginning of the thirteenth centuries. A few of the equestrian seals show charges on the shields of the riders; and the regular armorial seals, which begin about 1200, have much value for the illustration of early heraldry. The Counts of Eu held greater estates in Normandy than in Sussex, and this brought Robertsbridge into connexion with the Norman Abbeys of Eu and Tréport; the latter Abbey had English lands which it leased and eventually sold to Robertsbridge; this accounts for the presence of various seals of Eu and Tréport in the Robertsbridge collection. It is natural that the collection should include seals of neighbouring monastic houses; but those of St. Mary Hastings, Bayham Abbey, and Horton Priory are of exceptional interest for their rarity. The seals of less important persons are very numerous and varied. It is only possible to deal with some of the more interesting. Of the seals described below the greater number are not noticed in the *Catalogue of Seals at the British Museum.*

It is clear that at Robertsbridge Abbey the monks took pains to arrange their muniments in a convenient manner. Some time about the middle of the thirteenth century, and probably between 1250 and 1260, all the more important deeds then existing had press-marks written on the backs. These marks are in three classes. (1) Distinguished by a dagger, which seems to have been used for what may be described as foundation charters, such as the Confirmation Charter of Richard I and most of the charters of the Counts of Eu. (2) Distinguished by a cross, generally appearing on deeds which had reference to

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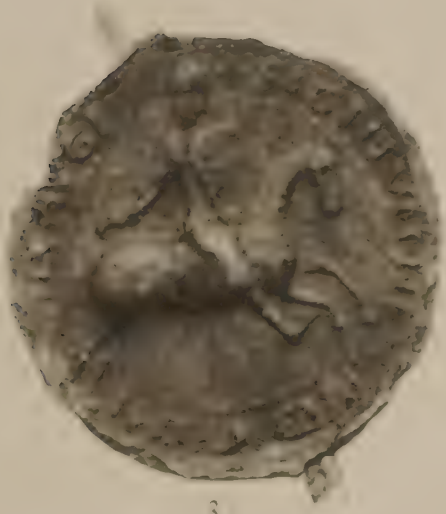

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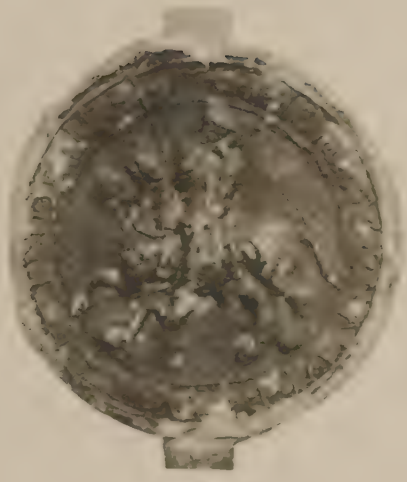

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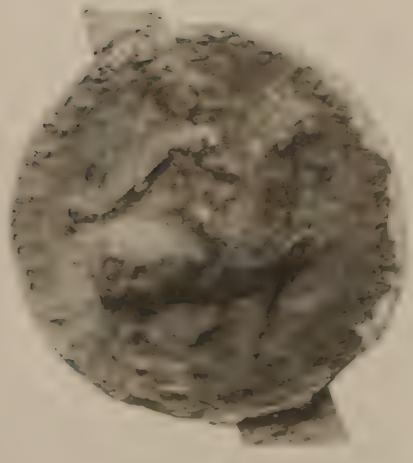

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ROBERTSBRIDGE SEALS: EQUESTRIAN

Published by the Society of Antiquaries of London, 1914

transactions with some other religious house, but occasionally on other deeds, like the deeds of Geoffrey de St. Martin dated in 1160 and 1165. (3) Distinguished by a capital letter, for deeds relating to transactions with private persons; at least twelve letters were used. The deeds in each class were divided into subclasses by numerals, whilst individual deeds in the subclass were distinguished by one or more dots. The arrangement of the deeds in the third class would seem to have been topographical. A similar system of marking was maintained down to about 1370, though not so carefully as before, and many deeds during this period have no mark. After 1370, or thereabouts, the practice seems to have been abandoned altogether. In excuse for the diminished care thus shown, one may point out that the permanent value of the later deeds, many of which were of the nature of leases, was much less than that of the earlier ones on which the Abbey's actual title to its lands had depended.[1] The accompanying illustration shows five specimens of the early press-marks, and one from a deed of the beginning of the fourteenth century. The originals are somewhat larger than the illustrations; but, as might be expected, the marks vary in size on different deeds.

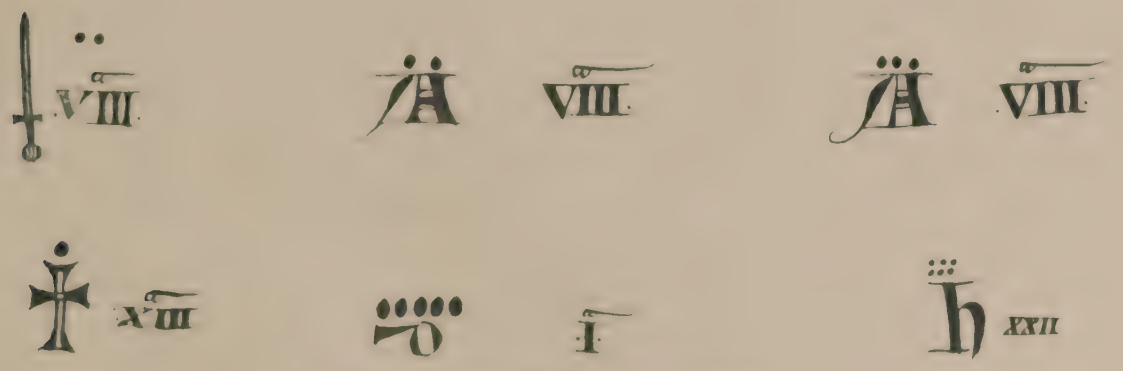

Fig. 2. Press-marks on Robertsbridge deeds.

[1] The system of press-marks will be described more fully in the Introduction to the Report on the Manuscripts of Lord De L'Isle and Dudley now being prepared for the Royal Commission on Historical Manuscripts.

LIST OF SEALS EXHIBITED

I. Penshurst Seals.

William de Pulteney. Date 1356. Round: $1\frac{1}{4}$ inch. A shield charged with a fess dancetty, in chief three leopards' faces; the shield, in an octofoil, suspended from a tree. Inscription: S. Willelmi de Polteney (Gothic lettering). Plate XXX, 1.

Sir Nicholas de Loveyn. Date 1370. Round: 1 inch. Shield: on a bend cotised three saltires, in chief a mullet; the shield suspended from a tree. Inscription: Sigillum Nicholai de Louayne (Gothic lettering). Similar in design to William de Pulteney's seal. Plate XXX, 2.

Sir Robert Belknap, chief justice of the common pleas from 1374 to 1387. Round: $1\frac{1}{8}$ inch. The Virgin and Child with two saints under a canopy; below a shield charged with three eagles erased. Inscription: . . . gillvm Rob'ti de Belk . . . Plate XXX, 3.

John Platyn. Date 1375. Round: $\frac{3}{4}$ inch. Shield: a bend, on a canton paly a chief. Margin defaced and broken on one side. Plate XXX, 4.

Sir John Colpeper. Date 1484. Round: $1\frac{1}{8}$ inch. A shield in an octofoil: a fess engrailed. Inscription: Sigillvm [Io]annis Colpeper. This specimen is on a deed dated 1484, but the seal is identical with one used by his ancestor and namesake in the reign of Richard II. Plate XXX, 5.

Richard Chamberlain. Date 1484. Father of Sir Edward (*d.* 1543). Round: $1\frac{1}{4}$ inch. Shield: a chevron between three scallops. The inscription has a curious engraver's error: S. Ricardvo Chawmbirlein. Another Richard Chamberlain early in the fifteenth century used a different seal, but with the same arms. Plate XXX, 6.

II. Tatteshall Seals.

Walter Bek. Date *c.* 1210. Round: about $2\frac{1}{2}$ inches: imperfect. Equestrian: underneath, a dog; the Bek cross is shown on the trappers of the horse and in the border. Inscription: . . . . . ek . . . eresbi. + +. Plate XXX, 7.

Maud de Cromwell. Date 1406. She was daughter of John de Bernake and wife of Ralph de Cromwell, grandfather of the builder of Tatteshall Castle. Her grandmother Alice de Driby was daughter of Robert de Driby, whose wife Joan was great-aunt and coheir of the last Robert de Tateshale, who died in 1306. Seal: round: 1 inch. Four shields: in the centre, Bernake—ermine, a fess—impaling Cromwell—a chief (diapré) and baton; at top, Tateshale, checky, a chief ermine with a label of four pieces; right, Bernake; left, Driby, three cinquefoils and a canton. These are the four shields which are sculptured on the fireplaces at Tatteshall Castle. In the *Catalogue of Seals at the British Museum* (i, 9097) the third shield is erroneously described as Marmion—vair, a fess. Inscription: Sigillum Matildis Cromwelle (Gothic lettering). Plate XXX, 9.

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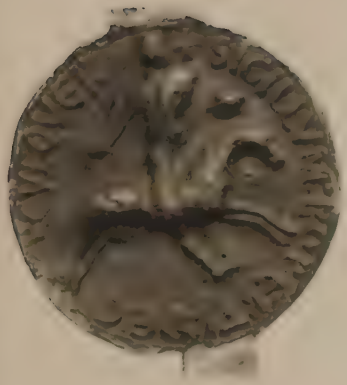

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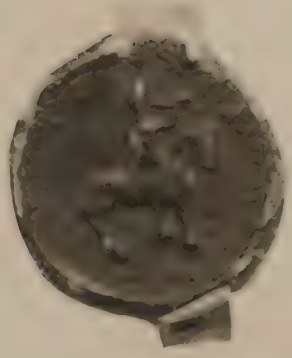

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ROBERTSBRIDGE SEALS: EQUESTRIAN AND MISCELLANEOUS

William Alnwick, bishop of Lincoln, 1436 to 1449. Oval, pointed: 3 × 1¾ inches. Three niches in a Gothic canopy: in the centre, the Virgin and Child; on her right, St. Michael and the dragon, inscr. S. Mich.; on her left, a bishop, inscr. S. Hugo. In a niche beneath the Virgin, a half-length of Bishop Alnwick; on the right, a shield charged with two lions passant, and a chief (?); on the left, a shield with the Bek cross. Inscription: Sigillu: Willi: dei: gracia: Lincoln: epi: (Gothic lettering). Alnwick had first used a round seal of similar design (though the first shield differs) but on a smaller scale; casts in British Museum; *Seals*, cx, 58, cxxxvi, 88. Plate XXX, 8.

Dean and Chapter of Lincoln. Oval, pointed: 3 × 2 inches; under a Gothic canopy two niches with trefoiled arches, in the first an angel, in the second the Virgin (?) with the model of a church; above the Virgin's head a dove; an ornamented corbel at the base; above the canopy a crescent and star. Inscription: . . . Capituli: Ecclie: Lincoln: ad: [c]ausas: et: neg[ocia: n]ecnon: [ad: a]lienand . . . See *Cat. Seals at Brit. Mus.*, i, 1803; from a cast. Plate XXX, 10.

Richard Caudrey, Archidiacon of Lincoln. Oval, pointed: broken; about 2 × 1¾ inches, when perfect. In a Gothic canopy, the Virgin and Child; underneath, the half-length figure of a priest. Inscription: . . . . llū: Ricardi Caudr . . . . . rchidiaconi . . . . . (Gothic lettering).

These three seals are affixed to a notarial document, attested by Thomas Colston, and executed in Nov. Dec. 1444; it relates to the foundation of Tatteshall College.

III. Robertsbridge Seals.

1. *Equestrian.*

John, Count of Eu (*d.* 1170). Date of deed 1160. Seal: paste: round: 3 inches. Inscription: I[o]annes Comes [A]vgi Sigillvm. The letters of the last word in the inscription are interspersed about the knight's figure. The seal is attached to a charter of Geoffrey de St. Martin, whose own seal (see below), though now separated, is still preserved. There are fine impressions of the seals of Count John and of Geoffrey de St. Martin on Egerton Charter 371 (date 1165) at the British Museum, a document which bears the Robertsbridge Abbey press-mark. Plate XXXI, 1.

Alvred de St. Martin. Date *c.* 1180. Round: 2¼ inches. Seal: paste; the impression is bad, and the inscription only legible in part: Sigillv . . . . . tino. Figured not very accurately in *Sussex Archaeological Collections*, viii, 156 from a specimen at the British Museum.

Henry, Count of Eu (*d.* 1183), son of Count John. Date of deed *c.* 1180. Seal: round: 2¼ inches. The knight's shield is charged with a bordure. Inscription: Sigillvm Henrici Comitis Avgi. Plate XXXI, 3.

Walter de Scoteny. Date *c.* 1180. Seal: round: 2¼ inches. Inscription: Sigillvm Walteri de [Sc]oteni. There is a trace of a charge on the shield. Walter de Scoteny also used another equestrian seal, which shows the charge more clearly. Round: 2 inches. Inscription: Sigillvm Walter de Scoteni. The first of these seals is figured on Plate XXXI, 2.

Reynold de Meiniers. Date *c.* 1180. Round: $2\frac{1}{4}$ inches. Inscription: Sigill. Reginaldi de Maneriis. Plate XXXI, 5.

Ingelram de Fressenville. Date *c.* 1180. Round: $2\frac{1}{4}$ inches. No inscription. Plate XXXI, 6.

The last two seals are affixed to the same deed, together with the seal of Ingelram's daughter, Maud, who was wife of Reynold. The date can be fixed approximately by the fact that the grant to Robertsbridge Abbey was confirmed by Henry, Count of Eu.

John de Harengod. Date *c.* 1185. Round: $2\frac{1}{2}$ inches. Inscription: Sigillvm Ioan. Helegod.

Randulf de Hechinden. His first seal; attached to documents, which can be dated between 1185 and 1195. Randulf took part in the Third Crusade. One specimen is on a deed, which has attached to it a Fine dated 1194. It is curious that this fine equestrian seal should have been abandoned for the commonplace design of his second seal (see p. 264, below). Seal: round: $2\frac{1}{2}$ inches. Inscription: Sigillvm Ranvlfi de Hecindene. Plate XXXI, 4.

William de St. Martin, probably a nephew of Alvred de St. Martin. Date about 1190. Round: 2 inches. Inscription: S. Willelmi de Sancto M[art]ino. Plate XXXII, 5.

Walter de St. Martin. Date *c.* 1190. Round: $2\frac{1}{4}$ inches; paste, slightly chipped at edges. Inscription: Sigillvm . . . . . ino.

Ralph de Yssoudun, Count of Eu, husband of Alice, sister and heiress of Count Ralph, who died as a boy in 1186, and daughter of Count Henry. This is his second seal; the deed to which it is attached is to be dated about 1200, and the seal cannot be much earlier. The figures both of horse and rider are artistically much superior to those of the earlier seals. Ralph is in civil dress, with a horn slung behind him. On the trappings of the horse is shown the label which formed part of Ralph's arms. The reverse has a shield charged with five bars and a label of eight pieces. Seal: round: $2\frac{1}{2}$ inches. Inscription: Sigill. Radvlfi de Issovdvn Comitis D'Eo. The obverse is figured on Plate XXXII, 1.

Robert de Crevecoeur. Date about 1200. Round: $1\frac{7}{8}$ inches. Inscription: Sigillvm Roberti de Crevequer. The shield is charged with two fleurs-de-lis, which are shown more plainly on another, but less perfect, example; above the horse's head is a heart, in punning allusion to the owner's name. On the reverse is a counter-seal—round: $\frac{3}{4}$ inch—formed of a gem, with the inscription: Secretvm Mevm. Plate XXXII, 3.

Alvred de Basokes. Date *c.* 1200. Round: $1\frac{3}{4}$ inch. Inscription: Sigillvm Alvre[di d]e Basokes. The knight's surcoat and shield are charged, lozengy. Plate XXXII, 4.

William de Bodiham. Date *c.* 1210. Round: $1\frac{3}{4}$ inch. Inscription: Sigill. Willelmi de Bodiham. The shield has a charge, within a bordure.

Gilbert de Benigworth. Date *c.* 1210. Round: 2 inches. Perfect. Inscription: Sigillvm Gilberti de Beningwore. See *Catalogue of Seals at the British Museum*, ii, 5685.

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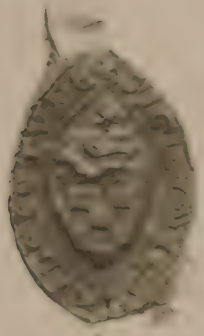

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ROBERTSBRIDGE SEALS: ARMORIAL

Published by the Society of Antiquaries of London, 19

William de Burgersse. Date about 1210. A man on horseback, blowing a horn. Round: 1¼ inch. Inscription: Sigill. Willi filii Alei de B. Plate XXXII, 7.

William de Muncels, son of Waleran de Herste. Date about 1220. The shield is charged with a bend. Round: 2 inches. Inscription: Sigillvm Willelmi de M..... Plate XXXII, 2.

Hamo de Crevecoeur. Date March 1233. Round: 1½ inch. Inscription: Sigill. Hamon. de Crevequer. The obverse is much inferior in execution to the seal of Robert de Crevecoeur. On the reverse is a counterseal (oval: ⅞ × ⅝ inch) formed of a fine antique gem—a head; there are traces of an inscription round it.

William de Echingham, who was summoned to Parliament as a baron from 1311 to 1322, and died before 1331, having married Eva, daughter of Ralph de Stopham. Seal: round: 1¾ inch. Obverse: equestrian, the shield and trappers emblazoned fretty; in the margins four small shields: 1, on a chief, two pierced mullets; 2, three crescents, over all a canton, Stopham; 3, three bars, over all a bend; 4, lozengy. Inscription: S. Willi de Echingham. Reverse: four shields in point: 1, Echingham; 2, as 1 on obverse; 3, Stopham; 4, lozengy. See *Cat. of Seals at the British Museum*, ii, 5892: engraved there on Plate IX.

2. *Armorial.*

Ralph de Yssoudun. Earlier than his equestrian seal, date about 1197. Round: 2½ inches. Shield: eight bars with a label of five pieces, thus differing from the reverse of his later seal. Plate XXXIII, 1.

Alice, Countess of Eu, wife of Ralph de Yssoudun. Date of deed 1225. Seal: oval; 2⅛ × 1½ inches. Obverse: a female figure in the dress of the time, with a bird on the left hand. Inscription: Sigill. Alicie Comitisse Avgi. Reverse: a shield, eleven bars with a label of eight pieces; above and below the shield are two roses. Inscription: as on obverse. Plate XXXIII, 2.

The variations in the charge of these three Eu shields are due to the fact that it was barruly and the number of bars was immaterial.

William de Hastings. Date *c.* 1200. Round: 1¼ inch. A fess between three lozenges. Inscription: Sigill. Gvlelmi de Hastinge. Plate XXXIII, 3.

Peter de Scoteny. The deed can be dated definitely *c.* 1216. Round: 1⅛ inch. Three billets on a bend with a bordure engrailed. Inscription: Sigillvm Petri de Scotenie. Plate XXXIII, 4.

Geoffrey de St. Leger. Date *c.* 1210. Round: 1½ inch. Fretty, with a chief. Inscription: Sigill. Galfridi de Sancto Leodegario. Plate XXXIII, 8.

Laurence de Mundefeld. Date *c.* 1220. Round: 1½ inch. Two bendlets, on a chief fretty a bar. Inscription: Sigill. Lavrentii de Mvndif. On the reverse is a counterseal: round: 1⅛ inch; a dragon. Inscription: Sigill. Lorenc. de Myndefeld. Plate XXXIII, 5.

Nicholas de Potun. Date *c.* 1220. Oval: 1½ × 1 inch. Checky, on a chief a lion passant; above the shield is a star. Inscription: Sigill. Nicolai de Potvnl. Plate XXXIII, 6.

William de Maufe. Date *c.* 1270. Shield-shaped: $1\frac{1}{8} \times \frac{7}{8}$ inch. A lion rampant. Inscription: Sig. Willi. Mavfe. Plate XXXIII, 7.

Alan de Bokeselle. He used three seals: (1) On a deed dated 1305; oval: 1 inch. An oak branch. Inscription: S. Alani de Bokeselle. (2) Date 1310. Three shields in point: (*a*) three crescents and a canton, Stopham; (*b*) quarterly, over all a bend vairé; (*c*) fretty, Echingham. Underneath, a lion couchant. Inscription: S. Alani de Bokeselle. The second and third shields indicate that Alan was related to Sir William de Echingham (see p. 263, above); the deed to which this seal is attached was executed at Echingham. (3) On deeds dated 1317. Round: 1 inch. On a shield in a quatrefoil, a lion rampant. Inscription: Sigill. Alani de Bokesell.

John V, Duke of Brittany. Date of deed November 29, 1377. Round: $1\frac{1}{2}$ inch. Under a Gothic canopy a shield, ermine; surmounted by a helmet and mantling with crest, a lion seated between two horns, on each of which is an ermine spot; supporters, two wild men. An example of the same seal described in the *Catalogue of Seals at the British Museum* (v, 20047) is very imperfect, and it is stated in the catalogue that the inscription is lost. The one at Penshurst shows clearly that there was no inscription. Plate XXXIII, 9.

Alice, Lady Boteler de Sudley (*d.* 1443), daughter of Sir John Beauchamp de Powyk, married (1) before 1393, Thomas Boteler, Lord Sudeley (*d.* 1398), and (2) Sir John Dalyngregge of Bodiham, whose widow she was when she executed the deed to which this seal is attached, on February 5, 1410. Her first husband was a son of John, second Lord Sudeley, by Maud, daughter of John de Montfort of Beaudesert. Seal: round: $1\frac{1}{4}$ inch. In the centre a shield: Boteler of Sudley, 1st and 4th quarters, a fess checky, between six crosses patée fitchée; 2nd and 3rd quarters, two bendlets for Montfort: impaling Beauchamp of Powyk, a fess between six martlets. Between the shield and the border are three lizards with their tails looped in knots. Inscription: Sigillum dne. Alicie Boteler dne. de Suydle (Gothic lettering). Plate XXXIII, 10.

3. *Miscellaneous.*

Geoffrey de St. Martin. Brother of Alvred de St. Martin. Date 1160. Round: 2 inches. A lion. Inscription: Sigill. Gavfridi de Sco. Martino. Plate XXXII, 6.

Daniel de Crevecoeur, or Creifecver. Date *c.* 1175. Paste: round: 2 inches. A rude figure (perhaps St. Michael) astride a dragon. Inscription barely legible: Sigil . . . . . evr. Plate XXXII, 8.

Randulf de Hechinden. Second seal. In charters to which it is attached, dated about 1200, Randulf refers specifically to charters under his first seal (see p. 262, above). Oval: $2 \times 1\frac{1}{4}$ inches; a fleur-de-lis. Inscription: Sigill. Randvl . . s de Hethinden. Plate XXXIV, 2.

Robert de Walland. On deeds dated between 1190 and 1210. Seal: paste: round: 2 inches. An eagle, with wings spread. Inscription: Sigill. Roberti de Wallande. Plate XXXIV, 1.

ROBERTSBRIDGE SEALS: MISCELLANEOUS

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Bartholomew de Cuvin. This seal occurs on several deeds, the earliest of which is only a little later than 1200. Round: $1\frac{1}{4}$ inch. A lion. Inscription: Sigill. Bartholomei de Coovini. Plate XXXIV, 3.

Maud de Meiniers, daughter of Ingelram de Fressenville, and wife of Reynold de Meiniers (see p. 262, above). First seal: date *c.* 1180, attached to the same deed as the seals of her father and husband. Oval: $1\frac{5}{8} \times 1\frac{1}{2}$ inches; a woman with a baby, possibly a rude representation of the Virgin and Child. Inscription: Sig. Matildis de Fressenvill. Plate XXXIV, 4. Second seal: occurs on a deed which can be dated definitely *c.* 1216, mentioning Peter de Scoteny; amongst the witnesses are William, Earl Warenne, and Matthew Fitzherbert, sheriff of Sussex. Seal: oval: $1\frac{3}{4} \times 1\frac{3}{4}$ inches. A female figure with a wand in her left hand and a purse in her right hand. Inscription: Sigill. Matildis de Meiniers. Plate XXXIV, 5.

Robert and Emma de Combe. Date *c.* 1210. Round: $1\frac{3}{8}$ inch. Obverse: seal of Robert: a peacock (?). Inscription: Sigill. Roberti de Cvmbes+. Reverse: seal of Emma: a double cross, with floriated ends. Inscription: Sigill. Emma filia Baldewini.

Stephen de Burstowe. Date *c.* 1220. Shield-shaped: $1\frac{3}{4} \times 1\frac{3}{8}$ inches. A remarkable and possibly unique seal, formed from three antique gems; there are two copies of it. Inscription: S. Stephani fil. Hamonis. Plate XXXIV, 9.

Thomas, William, and Austin de Promhelle, three brothers, whose seals are all attached to a deed dated about 1220. (*a*) Thomas. Round: $1\frac{1}{2}$ inch. A curious seal, as both design and inscription are inverted, through an error of the seal-cutter. A fleur-de-lis. Inscription: Sigill. Tome fil. Eilwini de Pronvile. (*b*) William. Round: $1\frac{7}{8}$ inch. A peacock with a fanciful tail. Inscription: Sigill. Will. de Pnhel. (*c*) Austin. Round: $1\frac{3}{4}$ inch. A leaf, the design and execution being similar to other contemporary seals in the Robertsbridge muniments. Inscription: Sigill. Avgvstini de Prvble. Plate XXXIV, 6, 7, 8.

John de Gestling. Round: $1\frac{5}{8}$ inch. A griffin. Inscription: Sigill. Iohannis de Ges[tlin]ges. There is a counterseal consisting of the letters Iohs. in an elliptical frame ($\frac{7}{8} \times \frac{1}{2}$ inch). The deed to which this seal is attached is of uncertain date, but might be as early as 1220; with this the main seal would agree; but the lettering of the counterseal is rather characteristic of a later date. Plate XXXIV, 10.

William de Ferrefoge. Date *c.* 1240. Round: $1\frac{1}{2}$ inch. A bird: a very rudely cut seal. Inscription: S. Will. de Ferrefge. This seal is in a bag of contemporary silken material.

Barons of Hastings. Date of deed August 1309. Round: $3\frac{1}{8}$ inches. See description in *Catalogue of Seals at the British Museum*, ii, 4979. This is a very fine impression, but has unfortunately been broken in two fragments and clumsily mended; part of the inscription has also been broken away.

Barons of Rye. Date of deed August 9, 1511. Seal: round: $2\frac{1}{4}$ inches. This fifteenth-century seal is described in the *Catalogue of Seals at the British Museum*, ii, 5352, but the Robertsbridge specimen is unusually fine.

4. *Ecclesiastical.*

(A) *English Abbeys and Abbots, etc.*

Canons of St. Mary, Hastings. Two seals. (1) Attached to a deed dated about 1190, but from a matrix, which is probably coeval with the foundation nearly a hundred years earlier. Oval: $2\frac{3}{4} \times 2\frac{1}{8}$ inches. The Virgin, seated, full-face, holding a church in her right hand and a lily in her left. Inscription: Sigillvm Eccle. Sce. Marie de Hastingis. There are several examples, all nearly of the same date. Plate XXXV, 4. (2) Occurs on a deed dated 1335. Oval: $2\frac{3}{4} \times 2$ inches. The Virgin, seated, three-quarter face, holding a church in her right hand and a lily in her left; in the background is Gothic tracery, apparently part of the Virgin's seat. Inscription: Sigill. Commvne Ecce. Sancte Marie de Hastingis. There are casts of both seals in the British Museum (*Seals*, cliv, 88, 89). Plate XXXV, 6.

Horton, or Monk's Horton, Priory in Kent. Founded *c.* 1160; date of deed *c.* 1200. Round: 2 inches. An eagle, as the emblem of St. John the Evangelist, the patron saint. Inscription: Devs erad verbvm. Plate XXXV, 2.

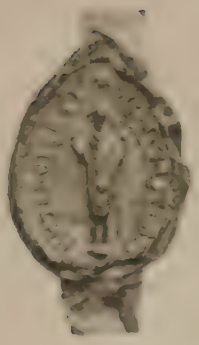
Bayham, or Beggeham Abbey. Founded 1200; date of deed 1296. Round: $2\frac{1}{2}$ inches. In the centre a representation of the Annunciation (the Abbey was dedicated to the Annunciation of the Blessed Virgin); on either side a niche with a man's head (one niche has been broken away). Underneath, the head of an abbot with a crozier, perhaps St. Norbert. Inscription: Sigill. Ecclie Sce. Marie de Begeham Ordi[nis Premonst]ratens. On the reverse is a counterseal: oval: $1\frac{3}{4} \times 1$ inch; the figure of an abbot; inscription: S. Abbatis Marie de Beggeham. Obverse on Plate XXXV, 8.

Abbot of Robertsbridge. Occurs on deeds between 1190 and 1250. Oval: $1\frac{5}{8} \times 1$ inch. The figure of an abbot. Inscription: Signvm Abbatis [de] Ponte Roberti. On the reverse is a counterseal: lozenge-shaped: $1\frac{1}{4} \times \frac{3}{4}$ inch; a hand holding a cross. Inscription: Signvm Secreti. Obverse on Plate XXXV, 1.

William, Abbot of Combwell, *c.* 1250. Oval: $1\frac{7}{8} \times \frac{15}{16}$ inch. The figure of an abbot holding a pastoral staff. Inscription: Sigillvm Willelmi Abbatis de Combwella. See *Catalogue of Seals at the British Museum*, i, 3002. Plate XXXV, 3.

Prior of Lewes. Date *c.* 1250; attached to the same deed as the Combwell seal. Oval: $1\frac{1}{8} \times \frac{7}{8}$ inch. A medieval gem: a head. Inscription: Cave Cavte Age. Plate XXXV, 5.

Laurence Champion, Abbot of Battle (1508–1529). Date of deed 1526. Oval: $2\frac{1}{2} \times 1\frac{5}{8}$ inches. Inscription: Sigill. Laurentii dei . . . Abbatis de Bello. Under a Gothic canopy the figure of an abbot; above, St. Martin giving his cloak to a beggar; on the abbot's right, a saint with a palm branch; on his left, a bishop. Below the first saint a shield charged with the arms of France and England quarterly; below the bishop a shield with the arms of the Abbey—on a cross between four crowns impaled on swords, a mitre. In the British Museum there is a cast (*Seals*, clviii, 17) from a seal of Abbot John (Newton); the original is on a deed dated 1485; it is of



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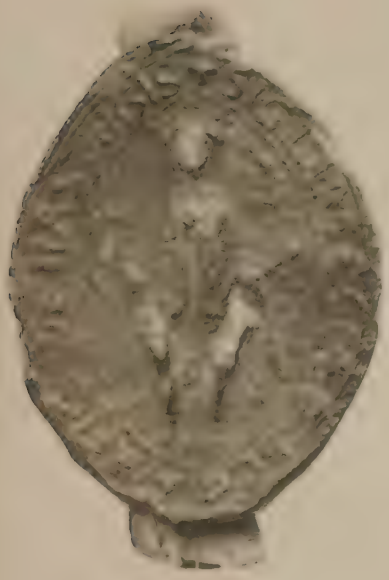

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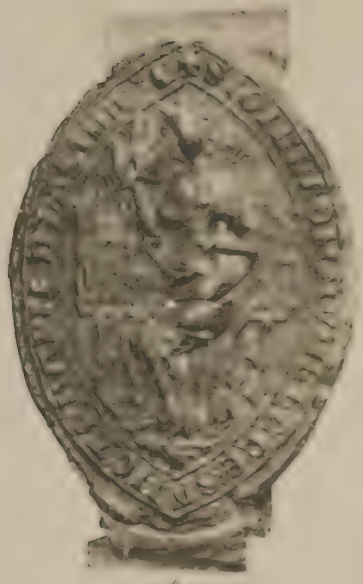

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ROBERTSBRIDGE SEALS: ECCLESIASTICAL, ENGLISH ABBEYS AND ABBOTS

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the same design, and, though only a fragment, preserves the second shield with the same charge. In a notice of the similar seal of Abbot John Hamond, who succeeded Champion, given in the *Monasticon* (iii, 238), the second shield is described as 'on a cross between four crowns, a mitre'. But the original on the Deed of Surrender at the Public Record Office has clearly four crowns impaled on swords.[1] In the *Victoria County History of Sussex* (ii, p. 54) there is a photographic reproduction of the seal of an Abbot John which also shows the crowns impaled on swords. A seal of this design must have been used by the Abbots of Battle for more than fifty years before the Dissolution. According to the *Monasticon* (iii, 238) there was some variety in the arms used by Battle Abbey, which are there described as either: (1) argent, on a cross gules, a mitre between two orbs in fesse and two crowns in pale; (2) gules, on a cross or, the text letter *r* azure, with two crowns in the 1st and 4th quarters, and two swords erect, points upward in the 2nd and 3rd quarters; or (3) gules, a cross argent, 1st quarter, a mitre with labels; 2nd quarter, a crown or.

The seal is of red wax, and is sunk (as also is Abbot Hamond's seal) as a counter-seal in the brownish wax seal of the Abbey, after a manner which seems to have been customary with the abbots' seals of Battle (see *Catalogue of Seals at the British Museum*, i, pp. 438–9). Plate XXXV, 7.

(B) *Norman Abbeys.*

Eu Abbey. Date *c.* 1196. Oval: broken: size, when perfect, about 3 × 2 inches. Figure of Christ (?) seated; a poor impression. Inscription: SIG . . . . . ENSIS ECCL . . The deed is a charter of Abbot Hugh, who occurs in 1196 and 1207.

Tréport Abbey. Date of deed 1252. Round: size, when perfect, about 2½ inches. St. Michael and the dragon. There are several examples, but all are more or less injured, and show only a few letters of the inscription; but one has the beginning HOC VLTRISPORT, and supplies a gap in a more perfect copy at the British Museum (*Catalogue of Seals*, v, 18891): H . . . VLTRISPORTVS SIGNVM MICHAELIS HABETVR. Plate XXXVI, 3.

Arthur, Abbot of Tréport. Date *c.* 1196. Oval: $2\frac{1}{4} \times 1\frac{3}{4}$ inches. Figure of an abbot. Inscription: SIGILLVM ARTVRI . . . . ATIS DE TREIPORT. Plate XXXVI, 6.

(C) *Other ecclesiastical persons.*

Ralph Neville, bishop of Chichester 1222 to 1244. In the document to which this seal is attached Ralph is described as chancellor; the date is therefore between 1226 and 1238, probably about 1230. Obverse: oval: $2\frac{1}{2} \times 1\frac{5}{8}$ inches; broken at the base; the figure of a bishop; inscription: RADVLFVS DEI GRATIA [CICES]TRENSIS EPISCOPVS. Reverse: counterseal, perfect: oval: $2 \times 1\frac{1}{4}$ inches; Christ in glory; underneath, the half-length figure of the bishop in profile to the left; inscription: TE VOCE REGE REGI VIGIL ESTO GREGI. Reverse on Plate XXXVI, 1.

This seal is in an ancient black leather bag lined with white damask.

[1] The inscription is: SIGILL. IOHIS. DEI GRATIA ABBATIS DE BELLO.

Richard de Wyche, bishop of Chichester 1245 to 1253. Obverse: oval: $2\frac{1}{2} \times 1\frac{1}{2}$ inches; broken; the figure of a bishop on a diapered background; inscription: . . . icard . . . . . Cicestrensis E . . . Reverse: counterseal, perfect: oval: $2 \times 1\frac{1}{2}$ inches; the figure of Christ under a trefoiled canopy, surmounted by a spire resembling that of Chichester Cathedral; on either side a candlestick with candle; underneath, a half-length figure of the bishop in profile to the right; inscription: Te Ricarde Rego Trinvs et vnvs ego. See *Catalogue of Seals at Brit. Mus.*, i, 1457. Reverse on Plate XXXVI, 2.

John Langton, bishop of Chichester 1305 to 1337, who was chancellor under Edward I from 1292 to 1302, and under Edward II from 1307 to 1309. Date of deed April 27, 1313. Seal: round: $3 \times 1\frac{2}{3}$ inches. Figure of a bishop. Inscription: S. Iohis. Dei Gra. Cicestrensis Epi. Figured in *Victoria County History of Sussex*, ii, 16.

Arnald, cardinal priest of St. Prisca, and abbot of Fontfroide, a Cistercian house in Gascony, who was papal nuncio in England in 1312–13. Date of deed 1313. Seal: oval: $3 \times 1\frac{3}{4}$ inches. Three tiers of Gothic niches; at the top a figure of God the Father; in the centre the Virgin and Child; on the right, a saint with a palm branch, perhaps St. Prisca; on the left, a monk, kneeling, perhaps St. Bernard; at the bottom another monk, kneeling, probably Arnald himself. Inscription: S. Fratris Arnaldi Dei Gra. Sce. Prisce Pbri. Cardinalis. Plate XXXVI, 5.

John de Geyting, or Geytentun, archdeacon of Lewes. Date of deed 1313. Seal: oval: $2 \times 1\frac{1}{4}$ inches. The Virgin and Child under a canopy, with a priest, kneeling. Inscription: S. Iohis. de Geyting Archid. Lewen. Plate XXXVI, 4.

Chapter of Chichester. A broken specimen of the seal, showing a church; figured in *Victoria County History of Sussex*, ii, p. 16.

The last four seals are all attached to the same deed, which is a notarial document. They are all protected by bags of pink leather; four other seals in the Robertsbridge muniments have similar bags, viz. a royal seal of 1269, a seal of 1293, and two great seals of 1309; these bags may date from the early part of the fourteenth century.

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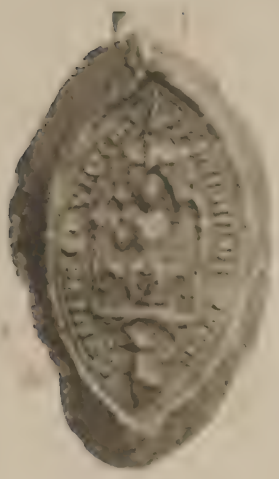

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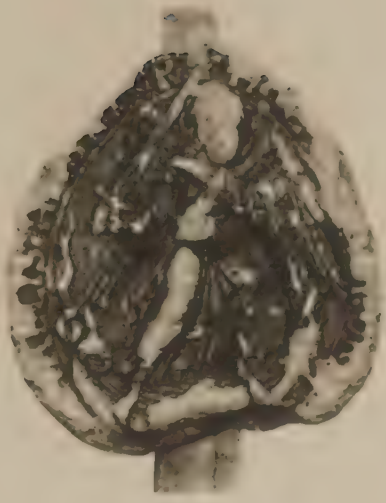

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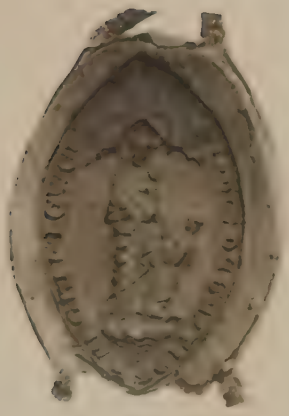

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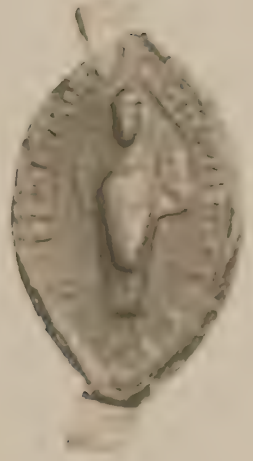

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ROBERTSBRIDGE SEALS: ECCLESIASTICAL

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